**LOUISVILLE - JEFFERSON COUNTY METRO GOVERNMENT**
**AIR POLLUTION CONTROL DISTRICT**

# TITLE V OPERATING PERMIT

Permit No.: 154-97-TV (R1) Plant ID: 0011

Effective Date: 31 August 2006 Expiration Date: 31 August 2011

UTM Northing: 4229.5 UTM Easting: 600.9

SIC: 2822 NAICS: 325212 AFS: 00011

Permission is hereby given by the Louisville - Jefferson County Metro Government Air Pollution Control District to operate equipment located at:

**American Synthetic Rubber Company, LLC**
**4500 Camp Ground Road**
**Louisville, Kentucky 40216**

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. This permit and the authorization to operate the emission units listed shall expire on midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Applicant for Permit: American Synthetic Rubber Company, LLC

Responsible Officials: James Dunbaugh Jr
Richard M. Robinson
Title of Responsible Official: President
Environment and Protection Manager
Date Application Received: 18 April 1997; rev. 13 August 2003

Date Application Administratively Complete: 12 May1997; 13 October 2003

Date Public Notice Given: 4 September 2005

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Reviewing Engineer (61) Air Pollution Control Officer

## Table of Contents

**Title V Permit Revisions/Changes**

| Revision No. | Date of Reissuance | Public Notice Date | Type | Emission Unit/Page No. | Description |
|---|---|---|---|---|---|
| Initial | 8/31/2006 | 9/4/2005 | Initial | Entire Permit | Entire Permit |
| R1 | 8/31/2006 | N/A | Admin | Cover Page | Changed the Responsible Official |

## Abbreviations and Acronyms

| | |
|---|---|
| AC | - Additional Condition |
| AFS | - AIRS Facility Subsystem |
| AIRS | - Aerometric Information Retrieval System |
| APCD | - Air Pollution Control District, or District |
| ASL | - Adjusted Significant Level |
| atm | - Atmosphere |
| BACT | - Best Available Control Technology |
| Btu | - British Thermal Unit |
| °C | - Degrees Centigrade |
| CEMS | - Continuous Emission Monitoring System |
| CAAA | - Clean Air Act Amendments (15 November 1990) |
| cf | - Cubic foot |
| DOE | - District Only Enforceable |
| °F | - Degrees Fahrenheit |
| gal | - Gallon |
| HAP | - Hazardous Air Pollutant |
| Hg | - Mercury |
| hr | - hour |
| lbs | - Pounds |
| l | - Liter |
| MACT | - Maximum Achievable Control Technology |
| m | - Meter |
| mg | - Milligram |
| mm | - Millimeter |
| MM | - Million |
| MOCS | - Management of Change System |
| NAICS | - North American Industry Classification System |
| NSR | - New Source Review |
| $NO_x$ | - Nitrogen oxides |
| NSPS | - New Source Performance Standards |
| PM | - Particulate Matter |
| $PM_{10}$ | - Particulate matter less than 10 microns diameter |
| ppm | - Parts per million |
| PSD | - Prevention of Significant Deterioration |
| PMP | - Preventive Maintenance Plan |
| psia | - Pounds per square inch absolute |
| RACT | - Reasonably Available Control Technology |
| SIC | - Standard Industrial Classification |
| SIP | - State Implementation Plan |
| $SO_2$ | - Sulfur dioxide |
| TAL | - Threshold Ambient Limit |
| TAP | - Toxic Air Pollutant |
| tpy | - Tons per year |
| UTM | - Universal Transverse Mercator |
| VOC | - Volatile Organic Compound |

## Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Metro Louisville, Kentucky, the Louisville Metro Air Pollution Control District (APCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a list of "insignificant activities," as defined in District Regulation 2.16, section 1.22 which was current as of the date the permit was proposed for review by USEPA, Region 4. Activities so identified may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply. No periodic monitoring shall be required for facilities designated as insignificant activities.

## General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)

2. **Compliance Certification** - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

   ***US EPA - Region IV***
   ***Air Enforcement Branch***
   ***Atlanta Federal Center***
   ***61 Forsyth Street***
   ***Atlanta, GA 30303-8960***

3. **Compliance Schedule** - A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:

   a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.

   b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

i. An emergency occurred and that the owner or operator can identify the cause of the emergency.

ii. The permitted facility was at the time being properly operated.

iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the upset condition. This notice must fulfill the requirement of this condition, and must contain a description of the upset condition, any steps taken to mitigate emissions, and any corrective actions taken.

b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

c. This condition is in addition to any emergency or upset provision contained in an applicable requirement.

(Regulation 2.16, sections 4.7.1 through 4.7.4)

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

9. **Enforcement Action Defense**

a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation.

(Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6) If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)

12. **Insignificant Activities** - The owner or operator shall:

a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)

b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. (Regulation 2.16, section 4.3.5.3.6)

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

a. Enter the premises to inspect any emissions-related activity or records required in this permit.

b. Have access to and copy records required by this permit.

c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.

d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

(Regulation 2.16, section 4.3.2)

14. **Monitoring and Related Record Keeping and Reporting Requirements** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)

16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.

17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.

18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.

19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.

20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)

22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.

23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and

renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.

24. **Permit Revocation and Termination by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:

    a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.

    b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.

    c. Knowingly making any false statement in any permit application.

    d. Noncompliance with Regulation 1.07; or

    e. Noncompliance with KRS Chapter 77.

25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.

26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.

27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.

28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.

29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.

30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.

31. **Risk Management Plan (112(r))** - For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.

32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to

other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)

33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.

34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.

35. **Submittal of Reports, Data, Notifications, and Applications**

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

***Louisville Metro Air Pollution Control District***
***850 Barret Ave***
***Louisville, KY 40204-1745***

b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

***US EPA - Region IV***
***APTMD - 12th floor***
***Atlanta Federal Center***
***61 Forsyth Street***
***Atlanta, GA 30303-3104***

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following regulations:

| FEDERALLY ENFORCEABLE REGULATIONS | |
|---|---|
| **Regulation** | **Title** |
| 1.01 | General Application of Regulations and Standards |
| 1.02 | Definitions |
| 1.03 | Abbreviations and Acronyms |
| 1.04 | Performance Tests |
| 1.05 | Compliance with Emission Standards and Maintenance Requirements |
| 1.06 | Stationary Source Self-Monitoring, Emissions Inventory Development, and Reporting |
| 1.07 | Excess Emissions During Startups, Shutdowns, and Upset Conditions |
| 1.08 | Administrative Procedures |
| 1.09 | Prohibition of Air Pollution |

| FEDERALLY ENFORCEABLE REGULATIONS | |
|---|---|
| **Regulation** | **Title** |
| 1.10 | Circumvention |
| 1.11 | Control of Open Burning |
| 1.14 | Control of Fugitive Particulate Emissions |
| 2.01 | General Application |
| 2.02 | Air Pollution Regulation Requirements and Exemptions |
| 2.03 | Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits |
| 2.07 | Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits |
| 2.09 | Causes for Permit Modification, Revocation, or Suspension |
| 2.10 | Stack Height Considerations |
| 2.11 | Air Quality Model Usage |
| 2.16 | Title V Operating Permits |
| 4.01 | General Provisions for Emergency Episodes |
| 4.02 | Episode Criteria |
| 4.03 | General Abatement Requirements |
| 4.07 | Episode Reporting Requirements |
| 6.01 | General Provisions (for *Existing Affected Facilities*) |
| 6.02 | Emission Monitoring for Existing Sources |
| 7.01 | General Provisions (for *New Affected Facilities*) |

| DISTRICT ONLY ENFORCEABLE REGULATIONS | |
|---|---|
| **Regulation** | **Title** |
| 1.12 | Control of Nuisances |
| 1.13 | Control of Objectionable Odors in the Ambient Air |
| 1.20 | Upset Condition Prevention Programs |
| 2.08 | Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Program Fees |
| 5.01 | General Provisions (Standards for Toxic Air Contaminants and Hazardous Air Pollutants) |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants |
| 5.22 | Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant |
| 5.23 | Categories of Toxic Air Contaminants |

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed

in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;

b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166.

d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;

g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40CFR82 Subpart A, Production and Consumption Controls.

(Regulation 2.16, section 4.1.5)

**Emission Unit U1/U2:** Synthetic Rubber Production

**Emission Unit Description:** Manufacturing of polybutadiene (PBR) and solution styrene butadiene rubber (SSBR).

**U1/U2 Applicable Regulations**

| Federally Enforceable Regulations | | |
|---|---|---|
| **Regulation** | **Subject** | **Applicable Sections** |
| 1.05 | Compliance with Emission Standards and Maintenance Requirements | 1, 3, 4, and 5 |
| 2.04 | Construction or Modification of Major Sources In or Impacting Upon Non-Attainment Areas (Emission Offset Requirements) | 1 through 10 |
| 5.15 | Chemical Accident Prevention Provisions | 1 |
| 6.13 | Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds | 1 through 5 |
| 6.22 | Standard of Performance for Existing Volatile Organic Materials Loading Facilities | 1 through 5 |
| 6.24 | Standard of Performance for Existing Sources Using Organic Materials | 1 through 5 |
| 6.43 | Volatile Organic Compound Emission Reduction Requirements | 1, 2, 3, 4, and 7 |
| 7.08 | Standards of Performance for New Process Operations | 1 through 3 |
| 7.12 | Standard of Performance for New Storage Vessels for Volatile Organic Compounds | 1 through 5 |
| 7.25 | Standard of Performance for New Sources Using Volatile Organic Compounds | 1 through 5 |
| 40 CFR 63 Subpart A | General Provisions | 63.1 through 63.15 |
| 40 CFR 63 Subpart U | National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins | 63.480 through 63.506 |
| 40 CFR 68 | Chemical Accident Prevention Provisions | Subparts A through H |

| District Only Enforceable Regulations | | |
|---|---|---|
| **Regulation** | **Subject** | **Applicable Sections** |
| 1.18 | Rule Effectiveness | 1 through 3 |
| 5.02 | Adoption of National Emission Standards for Hazardous Air Pollutants | 1, 3.1, 3.19, 4, and 5 |
| 5.11 | Standards of Performance for Existing Processes and Process Equipment Emitting Toxic Air Pollutants | 1 through 6 |
| 5.12 | Standards of Performance for New or Modified Processes or Process Equipment Emitting Toxic Air Pollutants | 1 through 5 |
| 5.14 | Hazardous Air Pollutants and Source Categories | 1 and 2 |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| **SSBR/PBR Tank Farm** | | | | | |
| General Tank Farm Truck Unloading | General Tank Farm Truck Unloading Early 1990's | 5.12 | Closed System | N/A | N/A |
| | | 7.25 | Closed System | | |
| Truck Staining Oil Loading/ Unloading | Truck Staining Oil Loading/Unloading 1940's (Bottom Load) | 6.22 | Closed System | N/A | N/A |
| | | 6.24 | Closed System | | |
| Truck Chemical Addition Materials Unloading | Truck Chemical Addition Materials Unloading 1960's | 5.11 | Closed System | N/A | N/A |
| | | 6.24 | Closed System | | |
| General Tank Farm Railcar Unloading | General Tank Farm Railcar Unloading 1940's | 5.11 | Closed System | N/A | N/A |
| | | 6.24 | Closed System | | |
| Railcar Staining Oil Loading/ Unloading | Railcar Staining Oil Loading/Unloading 1940's (Bottom Load) | 6.22 | Closed System | N/A | N/A |
| | | 6.24 | Closed System | | |
| Railcar Chemical Addition Materials Unloading | Railcar Chemical Addition Materials Unloading 1960's | 5.11 | Closed System | N/A | N/A |
| | | 6.24 | Closed System | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| Railcar Loading | Railcar Loading 1940's (Bottom Load) | 5.11 | Closed System or RACT | N/A or Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | N/A or S-FLARE TO and/or S-FLARE |
| | | 6.22 | See AC 1.d.iii. | | |
| Railcar Solvent Loading | Railcar Solvent Loading 1960's (Bottom Load) | 5.11 | ASL | None or Closed System | F (Fugitive) or N/A |
| | | 6.22 | See AC 1.d.iii. | | |
| T-2[5] | Storage Tank (Submerged Fill) 252,000 gal 1961 | 6.13 | See AC 1.d.i. | None or Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-U1/U2-T-2 or S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | See AC 1.b.ii. or Surge control vessel (See AC 1.b.vi.) | | |
| T-2A | Storage Tank (Submerged Fill) 100,000 gal 1987 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | See AC 1.d.i. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-2B | Storage Tank (Submerged Fill) 100,000 gal 1995 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | See AC 1.d.i. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-2C | Storage Tank (Submerged Fill) 100,000 gal 1995 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | See AC 1.d.i. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-3 | Storage Tank (Submerged Fill) 56,000 1961 | 6.13 | See AC 1.d.i. | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Storage vessel See AC 1.b.i. | | |
| T-4 | Storage Tank (Submerged Fill) 252,000 gal 1961 | 6.13 | See AC 1.d.i. | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-4A | Storage Tank (Submerged Fill) 100,000 gal 1987 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | See AC 1.d.i. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| T-4B | Storage Tank (Submerged Fill) 100,000 gal 1993 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | See AC 1.d.i. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-4C | Storage Tank (Submerged Fill) 100,000 gal 1995 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | See AC 1.d.i. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-15M | Storage Tank (Submerged Fill) 10,000 gal 1987 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | Submerged Fill; See AC 1.d.ii. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-15T | Storage Tank (Submerged Fill) 10,000 gal 1995 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.12 | Submerged Fill; See AC 1.d.ii. | | |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| T-32 | Storage Tank (Submerged Fill) 10,000 gal 1995 | 7.12 | Submerged Fill; See AC 1.d.ii. | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| Day Tank 2 | Day Tank 2 (Submerged Fill) 30,000 gal 1943 | 6.13 | Submerged Fill; See AC 1.d.ii. | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| Day Tank 3 | Day Tank 3 (Submerged Fill) 30,000 gal 1943 | 6.13 | Submerged Fill; See AC 1.d.ii. | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Surge control vessel See AC 1.b.vi. | | |
| Day Tank 4[5] | Day Tank 4 (Submerged Fill) 30,000 gal 1943 | 5.11 | ASL | None or Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-U1/U2-DTK-4 or S-FLARE TO and/or S-FLARE |
| | | 6.13 | Submerged Fill; See AC 1.d.ii. | | |
| | | 40 CFR 60 Subpart U | See AC 1.b.ii. or Surge control vessel (See AC 1.b.vi.) | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| Day Tank 5[5] | Day Tank 5 (Submerged Fill) 30,000 gal 1943 | 5.11 | ASL | None or Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-U1/U2-DTK-5 or S-FLARE TO and/or S-FLARE |
| | | 6.13 | Submerged Fill; See AC 1.d.ii. | | |
| | | 40 CFR 63 Subpart U | See AC 1.b.ii. or Surge control vessel (See AC 1.b.vi.) | | |
| Day Tank 6[5] | Day Tank 6 (Submerged Fill) 30,000 gal 1943 | 5.11 | ASL | None or Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-U1/U2-DTK-6 or S-FLARE TO and/or S-FLARE |
| | | 6.13 | Submerged Fill; See AC 1.d.ii. | | |
| | | 40 CFR 63 Subpart U | See AC 1.b.ii. or Surge control vessel (See AC 1.b.vi.) | | |
| T-11M | Storage Tank (Submerged Fill) 38,000 gal 1943 | 6.13 | Submerged Fill; See AC 1.d.ii. | None | S-U1/U2-T-11M |
| T-12M | Storage Tank (Submerged Fill) 38,000 gal 1943 | 6.13 | Submerged Fill; See AC 1.d.ii. | None | S-U1/U2-T-12M |
| T-13M | Storage Tank (Submerged Fill) 38,000 gal 1943 | 6.13 | Submerged Fill; See AC 1.d.ii. | None | S-U1/U2-T-13M |
| T-13T | Storage Tank (Submerged Fill) 38,000 gal 1995 | 7.12 | Submerged Fill; See AC 1.d.ii. | None | S-U1/U2-T-13T |
| **SSBR/PBR Solvent Purification** | | | | | |
| X-2M[1] | Purification Coalescer 277 gal 1987 | 5.12 | Closed System[1] | N/A | N/A |
| | | 7.25 | Closed System[1] | | |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| C-2M[1] | Drying Column 1987 | 5.12 | Closed System[1] | N/A | N/A |
| | | 7.25 | Closed System[1] | | |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-16M[2] | Reflux Accumulator 2,160 gal 1987 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 1 Continuous Front-End Process Vent; See AC 1.b.iii. | | |
| X-2[1] | Purification Coalescer 277 gal 1961 | 5.11 | Closed System[1] | N/A | N/A |
| | | 6.24 | Closed System[1] | | |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| C-2[1] | Drying Column 1999 | 5.12 | Closed System[1] | N/A | N/A |
| | | 7.25 | Closed System[1] | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-16[2] | Reflux Accumulator 2,160 gal 2004 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 1 Continuous front end process vent; See AC 1.b.iii. | | |
| X-2T[1] | Purification Coalescer 277 gal 1996 | 5.12 | Closed System[1] | N/A | N/A |
| | | 7.25 | Closed System[1] | | |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| C-2T[1] | Drying Column 1995 | 5.12 | Closed System[1] | N/A | N/A |
| | | 7.25 | Closed System[1] | | |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-16T[2] | Reflux Accumulator 2,160 gal 1996 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 1 Continuous Front-End Process Vent; See AC 1.b.iii. | | |
| D-59M[2] | Decanter 4,600 gal 1995 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-32[2] | Accumulator 3,050 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-15[2] | Feed Drum 395 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| C-7[1] | Drying Column 1961 | 6.24 | Closed System[1] | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| **SSBR/PBR Butadiene Purification** | | | | | |
| C-1[1] | Drying Column 1961 | 6.24 | Closed System[1] | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-10[1] | Drying Column Feed Drum 2,350 gal 1961 | 6.24 | Closed System[1] | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| C-1A[1] | Drying Column 1987 | 7.25 | Closed System[1] | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-10A[1] | Drying Column Feed Drum 2,350 gal 1987 | 7.25 | Closed System[1] | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| C-1T[1] | Drying Column 1996 | 7.25 | Closed System[1] | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-10T[3] | Drying Column Feed Drum 2,350 gal 1996 | 7.25 | Closed System or BACT | N/A or Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | N/A or S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Closed System or Group 1 Continuous Front-End Process Vent when venting directly to the (C-FLARE TO) and/or (C-FLARE); See ACs 1.b.iii. and 1.b.vii. | | |
| **Reject Butadiene System** | | | | | |
| D-17[1] | Knock-out Drum 70 gal 1961 | 5.11 | Closed System[1] | N/A | N/A |
| | | 6.24 | Closed System[1] | | |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-18[2] | Reject Accumulator with process absorber (C-5) 500 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-17T[1] | Knock out Drum 70 gal 1996 | 5.12 | Closed System[1] | N/A | N/A |
| | | 7.25 | Closed System[1] | | |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-18T[2] | Reject Accumulator with process absorber (C-5T) 500 gal 1996 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| **SSBR Styrene Purification** | | | | | |
| C-9M[2] | Drying Column with process absorber (C-10M) 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| **SSBR/PBR Chemical Addition** | | | | | |
| D-44 | Mix/Run Tank with seal pot D-44S 12,000 gal 2004 | 7.25 | BACT | None | S-U1/U2-D-44S |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-44M | Mix/Run Tank with common seal pot D-43M 1,220 gal 1987 | 7.25 | BACT | None | S-U1/U2-D-43M |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-45M | Mix/Run Tank with common seal pot D-43M 1,220 gal 1987 | 7.25 | BACT | None | S-U1/U2-D-43M |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| T-14 | Storage Tank (Submerged Fill) 7,900 gal 1987 | 7.12 | Submerged Fill; See AC 1.d.ii. | None | S-U1/U2-T-14 |
| D-7M[2] | Make-up/Run Tank 1,500 gal 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-5M[2] | Make-up/Run Tank 850 gal 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-56M[2] | Make-up/Run Tank 1,220 gal 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-57M[2] | Make-up/Run Tank 476 gal 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-8M[2] | Make-up/Run Tank 1,200 gal 1987 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-19M[2] | Mix/Run Tank 800 gal 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-20M[2] | Mix/Run Tank 800 gal 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-3 | Storage Tank (Submerged Fill) 17,000 gal 1961 | 6.13 | Submerged Fill; See AC 1.d.ii. | None | S-U1/U2-D-3 |
| BU-1T | Supersack Unloader 1996 | 7.08 | 5.08 lb/hr | Fabric Filter (C-U1/U2-DC-1T) | S-U1/U2-DC-1T |
| | | 7.08 | <20% Opacity | | |
| D-69M[2] | Make-up/Run Tank 7,500 gal 1996 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| T-1 | Storage Tank with seal pot T-1S (Submerged Fill) 42,000 gal 1961 | 6.13 | See AC 1.d.i. | None | S-U1/U2-T-1S |
| | | 40 CFR 63 Subpart U | Group 2 Storage vessel; See AC 1.b.i. | | |
| D-1 | Feed Tank with seal pot D-1S 2,000 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-1S |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-39 | Mix/Run Tank with seal pot D-39S 7,900 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-39S |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-7[2] | Mix/Run Tank 1,500 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-5 | Mix/Run Tank 1,300 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-5/ 38A/38B |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-38A | Storage and Feed Tank 17,000 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-5/ 38A/38B |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-38B | Storage and Feed Tank 17,000 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-5/ 38A/38B |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-6 | Mix/Run Tank with common seal pot D-6S 2,000 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-6S |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-8 | Mix/Run Tank with common seal pot D-6S 2,300 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-6S |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-68M[2] | Mix/Run Tank 7,500 gal 1995 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-155M[2] | Mix/Run Tank 2,000 gal 2002 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-60M[2] | Make-up/Run Tank 1,500 gal 1996 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63, Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-61M[2] | Make-up/Run Tank 1,200 gal 1996 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-67M[2] | Mix/Run Tank 7,500 gal 1995 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-66M[2] | Mix/Run Tank 4,000 gal 1995 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| **SSBR/PBR Polymerization** | | | | | |
| Reactor 1 through Reactor 13 | Reactor 1 through Reactor 13 4,040 gal each 1961 | 5.11 | Closed pressurized system[1] | N/A | N/A |
| | | 6.24 | Closed pressurized system[1] | | |
| | | 40 CFR 63 Subpart U | Closed pressurized system[1] | | |
| Reactor 14 | Reactor 14 4,300 gallons 1996 | 5.12 | Closed pressurized system[1] | N/A | N/A |
| | | 7.25 | Closed pressurized system[1] | | |
| | | 40 CFR 63 Subpart U | Closed pressurized system[1] | | |
| D-24[1] | Surge Tank 8,120 gal 1961 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-24M[1] | Surge Drum 7,600 gal 1987 | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-24T[1] | Surge Drum 7,500 gal 1996 | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-9[1] | Recovery Stripper with process condenser (E-60) 7,930 gal 1961 | 6.24 | Closed System[1] | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed System[1] | | |
| D-13 | Recovery Decanter 940 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | None | S-U1/U2-D-13 |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| **SSBR/PBR Concentration** | | | | | |
| D-25M[1] | Primary Flash Drum 12,400 gal 1987 | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-26M[1] | Secondary Flash Drum 5,100 gal 1987 | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-28M[2] | Flash Overhead Surge Drum with process absorber (C-8M) 6,150 gal 1987 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-25[1] | Primary Flash Drum 12,400 gal 1961 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-26[1] | Secondary Flash Drum 5,140 gal 1961 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-27[1] | Tertiary Flash Drum 1,960 gal 1961 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-28[2] | Flash Condenser Receiver and condensate drain tank (C-8) with process absorber (C-6) 5,760 gal 1961 | 5.11 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-25T[1] | Primary Flash Drum 7,800 gal 1996 | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-26T[1] | Secondary Flash Drum 4,500 gal 1996 | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| | | 40 CFR 63 Subpart U | Closed system[1] | | |
| D-28T[2] | Flash Overhead Surge Tank with process absorber (C-8T) 6,150 gal 1996 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-64M[2] | Flush Tank 863 gal 1987 | 7.25 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-29[2] | Recycle Calibration Drum 2,160 gal 1961 | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| **SSBR/PBR Blending** | | | | | |
| T-5A[2] | Blend Tank 84,000 gal 1961 | 5.11 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5B[2] | Blend Tank 84,000 gal 1961 | 5.11 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5C[2] | Blend Tank 84,000 gal 1961 | 5.11 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5D[2] | Blend Tank 84,000 gal 1961 | 5.11 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5E[2] | Blend Tank 84,000 gal 1961 | 5.11 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5F[2] | Blend Tank 84,000 gal 1987 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5G[2] | Blend Tank 85,000 gal 1990 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5H[2] | Blend Tank 84,000 gal 1992 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| T-5J[2] | Blend Tank 85,000 gal 1995 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| T-5K[2] | Blend Tank 85,000 gal 1998 | 5.12 | ASL | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>1.0 but < or = to 4.0); Considered Group 1 Continuous Front-End Process Vent; See AC 1.b.iv. | | |
| **SSBR/PBR Stripping** | | | | | |
| No. 1 Stripper Vessels | No. 1 Stripper Vessels and process condensers 1961 | 5.11 | Closed system | N/A | N/A |
| | | 6.24 | Closed system | | |
| | | 40 CFR 63 Subpart U | Closed system | | |
| No. 2 Stripper Vessels | No. 2 Stripper Vessels and process condensers 1961 | 5.11 | Closed system | N/A | N/A |
| | | 6.24 | Closed system | | |
| | | 40 CFR 63 Subpart U | Closed system | | |
| No. 3 Stripper Vessels | No. 3 Stripper Vessels and process condensers 2003 | 5.12 | Closed system | N/A | N/A |
| | | 7.25 | Closed system | | |
| | | 40 CFR 63 Subpart U | Closed system | | |
| No. 4 Stripper Vessels | No. 4 Stripper Vessels and process condensers 1995 | 5.12 | Closed system | N/A | N/A |
| | | 7.25 | Closed system | | |
| | | 40 CFR 63 Subpart U | Closed system | | |
| No. 5 Stripper Vessels | No. 5 Stripper Vessels and process condensers 1996 | 5.12 | Closed system | N/A | N/A |
| | | 7.25 | Closed system | | |
| | | 40 CFR 63 Subpart U | Closed system | | |
| D-30 | Decanter 9,740 gal 1984 | 5.11 | ASL | Condenser[6] (C-U1/U2-E-24) | S-U1/U2-D-30 |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-30M | Decanter 9,740 gal 1995 | 5.12 | ASL | Condenser[6] (C-U1/U2-E-24M) | S-U1/U2-D-30M |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| D-30T | Decanter 9,740 gal 1996 | 5.12 | ASL | Condenser[6] (C-U1/U2-E-24T) | S-U1/U2-D-30T |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Group 2 Continuous Front-End Process Vent (TRE>4.0); See AC 1.b.v. | | |
| T-9A | Crumb Tank with process condenser (E-32A) 47,000 gal 2000 | 7.25 | Closed system | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed system | | |
| T-9B | Crumb Tank with process condenser (E-32B) 47,000 gal 2001 | 7.25 | Closed system | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed system | | |
| T-9C | Crumb Tank with process condenser (E-32C) 47,000 gal 2004 | 7.25 | Closed system | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed system | | |
| T-9D | Crumb Tank with process condenser (E-32D) 47,000 gal 2004 | 7.25 | Closed system | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed system | | |
| T-9E/T | Crumb Tank with process condenser (E-32E/T) 47,000 gal 1996 | 7.25 | Closed system | N/A | N/A |
| | | 40 CFR 63 Subpart U | Closed system | | |
| **SSBR/PBR Finishing** | | | | | |
| No. 1 Line | No. 1 Finishing Line 1989 (See Comment 17) | 6.43 | Finishing building exhaust is to be ducted to one or both of the coal fired boilers, or to the Regenerative Thermal Oxidizer RTO-1 with at least 80% overall control efficiency (capture and control) | Boiler(s) (C-U1/U2-BLR1/2) or Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) | S-U4-BLR1/2 or S-U1/U2-RTO-1 |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Back-End Process Operation; See AC 1.b.x. | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| No. 2 Line | No. 2 Finishing Line 1989 | 6.43 | Finishing building exhaust is to be ducted to one or both of the coal fired boilers, or to the Regenerative Thermal Oxidizer RTO-1 with at least 80% overall control efficiency (capture and control) | Boiler(s) (C-U1/U2-BLR1/2) or Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) | S-U4-BLR1/2 or S-U1/U2-RTO-1 |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Back-End Process Operation; See AC 1.b.x. | | |
| No. 3 Line | No. 3 Finishing Line 1989 | 6.43 | Finishing building exhaust is to be ducted to one or both of the coal fired boilers, or to the Regenerative Thermal Oxidizer RTO-1 with at least 80% overall control efficiency (capture and control) | Boiler(s) (C-U1/U2-BLR1/2) or Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) | S-U4-BLR1/2 or S-U1/U2-RTO-1 |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Back-End Process Operation; See AC 1.b.x. | | |
| No. 4 Line | No. 4 Finishing Line 1995 (See Comment 17) | 6.43 | Finishing building exhaust is to be ducted to one or both of the coal fired boilers, or to the Regenerative Thermal Oxidizer RTO-1 with at least 80% overall control efficiency (capture and control) | Boiler(s) (C-U1/U2-BLR1/2) or Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) | S-U4-BLR1/2 or S-U1/U2-RTO-1 |
| | | 7.25 | BACT | | |
| | | 40 CFR 63 Subpart U | Back-End Process Operation; See AC 1.b.x. | | |
| No. 5 Line | No. 5 Finishing Line 1996 (See Comment 17) | 6.43 | Finishing building exhaust is to be ducted to one or both of the coal fired boilers, or to the Regenerative Thermal Oxidizer RTO-1 with at least 80% overall control efficiency (capture and control) | Boiler(s) (C-U1/U2-BLR1/2) or Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) | S-U4-BLR1/2 or S-U1/U2-RTO-1 |
| | | 7.25 | BACT | | |

| U1/U2 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U1/U2"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| | | 40 CFR 63 Subpart U | Back-End Process Operation; See AC 1.b.x. | | |
| **Miscellaneous** | | | | | |
| Heat Cleaning Oven | Heat Cleaning Oven 2003 | 5.12 | <ASL | N/A | S-U1/U2-HEAT CLEAN OVEN |
| | | 7.08 | 2.34 lb/hr | | |
| | | 7.08 | <20% opacity | | |
| | | 7.25 | BACT | | |

Notes:

1. These emission points do not have a process vent that vents directly to either the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE), or to the atmosphere. These emission points vent indirectly to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE) by venting to another emission point which ultimately vents directly to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE) . Also, these emission points may have a pressure relief valve that vents to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE) for safety purposes.
2. These emission points are process vents that vent directly to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE).
3. These emission points can be vented directly to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE), but are normally a closed pressurized system.
4. In the "Control Device" column, an entry of "N/A" indicates part of a closed system; an entry of "None" indicates no control device.
5. These emission points are equipped with optional process coolers not required by any underlying applicable requirement.
6. The cited control device is not required for compliance with any underlying applicable requirement. (See Comment 24)

**U1/U2 Additional Conditions**

1. **Standards** (Regulation 2.16, section 4.1.1)

a. **1,3-Butadiene**

i. The Flare Thermal Oxidizer (C-FLARE TO) shall be utilized as the primary control device, with the existing Flare Control System (C-FLARE) maintained as a safety device and back-up control for C-FLARE TO. (May 2004 Enforceable Board Agreement) (Construction Permit 112-04-C, dated August 31, 2004)

ii. The Flare Thermal Oxidizer shall have the capability to destroy the 1,3-butadiene that cannot be re-introduced into the manufacturing process. (May 2004 Enforceable Board Agreement)(Construction Permit 112-04-C, dated August 31, 2004)

iii. The Flare Thermal Oxidizer shall have a minimum destruction efficiency of 99.5%. (May 2004 Enforceable Board Agreement)(Construction Permit 112-04-C, dated August 31, 2004)

iv. The owner or operator shall design and operate the Flare Thermal Oxidizer to have a minimum of 0.50 second residence time. (Regulation 2.03, section 2.1) (Construction Permit 112-04-C, dated August 31, 2004)

v. The Flare Thermal Oxidizer (C-FLARE TO) shall be used to combust the process vent stream up to the maximum design gas flow for the Flare Thermal Oxidizer (C-FLARE TO), and any excess of the maximum design gas flow shall be diverted to the Flare Control System (C-FLARE). The maximum design gas flow to still achieve 99.5% destruction efficiency and 0.5 second residence time will be established during the performance test. (Regulation 2.03, section 2.1)(Construction Permit 112-04-C, dated August 31, 2004)

vi. The owner or operator shall be allowed to divert any or all of the process vent stream from the Flare Thermal Oxidizer to the Flare Control System for a maximum of 876 hours per 12 consecutive months. (Regulation 2.03, section 2.1)(Construction Permit 112-04-C, dated August 31, 2004)

b. **HAP (Non-LDAR)**

i. For Group 2 storage vessels (T-3 and T-1), there are no non-LDAR HAP standards for these vessels.

ii. For Emission Points (T-2, Day Tank 4, Day Tank 5, and Day Tank 6), when each is not being used as a Surge Control Vessel and is being used to store

styrene, there are no non-LDAR HAP standards since these emission points are exempt from the provisions of 40 CFR 63.484. (40 CFR 63.484(b)(5))

iii. For Group 1 Continuous Front-End Process Vents (D-16M, D-16, D-16T and D-10T, the latter when venting directly to the Flare Thermal Oxidizer as the primary control device (C-FLARE TO) and/or the Flare Control System as a secondary or backup control device (C-FLARE) and not being operated as a Closed System), the owner or operator shall reduce emissions of organic HAP using a Flare Thermal Oxidizer and/or a Flare Control System. (See Comment 3)

1) When the Flare Thermal Oxidizer (C-FLARE TO) is used, either alone or in combination with the existing Flare Control System (C-FLARE), to achieve the required organic HAP emission reduction, Additional Condition 1.b.viii. applies. (40 CFR 63.113(a)(2) as referenced by 40 CFR 63.485(a)) (See Comment 4)

2) When the Flare Control System (C-FLARE) is used, either alone or in combination with the Flare Thermal Oxidizer, to achieve the required emission reduction, it shall comply with the requirements of 40 CFR 63.11(b) and Additional Conditions 1.b.viii. and 1.b.ix. (40 CFR 63.113(a)(1) as referenced by 40 CFR 63.485(a)) (See Comment 4)

iv. For Group 2 Continuous Front-End Process Vents with TRE greater than 1.0 but less than or equal to 4.0 (T-5A, T-5B, T-5C, T-5D, T-5E, T-5F, T-5G, T-5H, T-5J and T-5K), the owner or operator has elected, per 40 CFR 63.115(d)(1)(ii) as referenced by 40 CFR 63.485, to consider these as Group 1 Continuous Front-End Process Vents. See Additional Condition 1.b.iii. (See Comment 3)

v. For Group 2 Continuous Front-End Process Vents with TRE greater than 4.0 (D-59M, D-32, D-15, D-13, D-18, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28, D-28T, D-64M, D-29, D-30, D-30M, and D-30T), there are no non-LDAR HAP standards for these emission points.

vi. For Surge Control Vessels (T-2 (when used as a surge control vessel), T-2A, T-2B, T-2C, T-4, T-4A, T-4B, T-4C, T-15M, T-15T, T-32, Day Tank 2 , Day Tank 3, Day Tank 4 (when used as a surge control vessel), Day Tank 5 (when used as a surge control vessel), and Day Tank 6 (when used as a surge control vessel)), there are no non-LDAR HAP standards for these emission points. (40 CFR 63.161 and 63.170 as referenced by 63.482 and 63.480) (See Comment 11)

vii. For Closed System or Closed Pressurized System Emission Points (X-2M, C-2M, X-2, C-2, X-2T, C-2T, C-7, D-9, C-1, D-10, C-1A, D-10A, C-1T, D-10T (when operated as a closed system), D-17, D-17T, Reactor 1 through 13, Reactor 14, D-24, D-24M, D-24T, D-25M, D-26M, D-25, D-26, D-27, D-25T, D-26T, No. 1 Stripper Vessels, No. 2 Stripper Vessels, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D, and T-9E/T), there are no non-LDAR HAP standards for these emission points.

viii. For the Flare Thermal Oxidizer (C-FLARE TO), the owner or operator shall reduce emissions of total organic hazardous air pollutants by 98 weight-percent or to a concentration of 20 parts per million by volume, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated on a dry basis, corrected to 3-percent oxygen, and compliance can be determined by measuring either organic hazardous air pollutants or total organic carbon using the procedures in §63.116. Demonstrating compliance with the destruction efficiency of 99.5% in Additional Condition 1.a.iii. also demonstrates compliance with this efficiency. (40 CFR 63.113(a)(2) as referenced by 40 CFR 63.485(a))

1) Compliance with 40 CFR 63.113(a)(2) may be achieved by using any combination of combustion, recovery, and/or recapture devices, except that a recovery device may not be used to comply with 40 CFR 63.113(a)(2) by reducing emissions of total organic hazardous air pollutants by 98 weight-percent, except as provided in 40 CFR 63.113(a)(2)(ii). (No re-capture or recovery devices, as defined for the purposes of 40 CFR Part 63 Subpart U, are involved with emissions reductions for these process vents.) (40 CFR 63.113(a)(2)(i) as referenced by 40 CFR 63.485(a)) (See Comment 4)

2) When a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in §63.113(a)(2), the correction to 3 percent oxygen is only required when supplemental combustion air is used to combust the emissions, for the purposes of 40 CFR Part 63 Subpart U. In addition, the correction to 3 percent oxygen specified in §§63.116(c)(3) and (c)(3)(iii) is only required when supplemental combustion air is used to combust the emissions, for the purposes of 40 CFR Part 63 Subpart U. Finally, when a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in §63.113(a)(2), an owner or operator shall record and report the outlet concentration required in §§63.117(a)(4)(ii) and (a)(4)(iv) corrected to 3 percent oxygen when supplemental combustion air is used to combust the emissions, for the purposes of 40 CFR Part 63 Subpart U. When supplemental combustion air is not used to combust the emissions, an owner or operator may record and report

the outlet concentration required in §§63.117(a)(4)(ii) and (a)(4)(iv) on an uncorrected basis or corrected to 3 percent oxygen, for the purposes of 40 CFR Part 63 Subpart U. (40 CFR 63.485(v))

ix. For the Flare Control System (C-FLARE), the owner or operator shall comply with the following requirements. (See Comment 22)

1) The flare shall be steam-assisted. (40 CFR 63.11(b)(2))

2) The flare shall be operated at all times when emissions may be vented to it. (40 CFR 63.11(b)(3))

3) The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. (40 CFR 63.11(b)(4))

4) The flare shall be operated with a flame present at all times. (40 CFR 63.11(b)(5))

x. For Back end process operations (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), the monthly weighted average residual organic HAP content of all grades of elastomer processed, measured after the stripping operation, shall not exceed 10 kg total organic HAP per Mg crumb rubber (dry weight). (40 CFR 63.494(a)(2)(i))

xi. For heat exchange systems, a leak is detected if the exit mean concentration is found to be greater than the entrance mean using a one-sided statistical procedure at the 0.05 level of significance and the amount by which it is greater is at least 1 part per million or 10 percent of the entrance mean, whichever is greater. (40 CFR 63.104(b)(6) as referenced by 40 CFR 63.502(n))

c. **HAP (LDAR)**

i. For pumps in light liquid service, the instrument reading, as determined by the method as specified in 40 CFR 63.180(b), that defines a leak in each phase of the standard is for Phase III, an instrument reading of 5,000 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and (c), for pumps handling polymerizing monomers and 1,000 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and (c), for all other pumps. (40 CFR 63.163(b)(2)(iii)(A) and (C)) For pumps to which a 1,000 parts per million above background level, as specified in 40 CFR 63.180(b) and (c), leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and (c), is detected. (40 CFR 63.163(c)(3) as referenced by 40 CFR 63.502(a))

ii. Reciprocating pumps in light liquid service are exempt from §63.163 and associated recordkeeping and reporting requirements, if recasting the distance piece or reciprocating pump replacement would be necessary to comply with 40 CFR 63.163. (40 CFR 63.502(d)(3)) (See Comment 15)

iii. Any compressor that is designated, as described in 40 CFR 63.181(b)(2)(ii), to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of 40 CFR 63.164(a) through (h) if the compressor is demonstrated to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR 63.180(c). (40 CFR 63.164(i)(1) as referenced by 40 CFR 63.502(a))

iv. For valves in gas vapor service and/or in light liquid service, the instrument reading that defines a leak in each phase of the standard is for Phase III, an instrument reading of 500 parts per million or greater above background level, using the method as specified in 40 CFR 63.180(b) and (c). (40 CFR 63.168(b)(2)(iii) as referenced by 40 CFR 63.502(a))

v. For agitators in gas/vapor service and/or in light liquid service, an instrument reading of 10,000 parts per million or greater above background level, using the method as specified in 40 CFR 63.180(b) and (c), indicates a leak is detected. (40 CFR 63.173(a)(2) as referenced by 40 CFR 63.502(a))

vi. For connectors in gas/vapor and/or in light liquid service, an instrument reading of 500 parts per million or greater above background level, using the method as specified in 40 CFR 63.180(b) and (c), indicates a leak is detected. (40 CFR 63.174(a)(2) as referenced by 40 CFR 63.502(a))

vii. For pressure relief devices in gas/vapor service,

1) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 63.172 is exempt from the requirements of 40 CFR 63.165(a) and (b). (40 CFR 63.165(c) as referenced by 40 CFR 63.502(a))

2) That are equipped with a rupture disk upstream of the pressure relief device are exempt from the requirements of 40 CFR 63.165(a) and (b), provided the owner or operator after each pressure release, installs a rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. (40 CFR 63.165(d)(1) and (2) as referenced by 40 CFR 63.502(a))

viii. For open ended valves or lines,

1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). (40 CFR 63.167(a)(1) as referenced by 40 CFR 63.502(a))

2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. (40 CFR 63.167(a)(2) as referenced by 40 CFR 63.502(a))

3) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. (40 CFR 63.167(b) as referenced by 40 CFR 63.502(a))

4) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 63.167(a) at all other times. (40 CFR 63.167(c) as referenced by 40 CFR 63.502(a))

5) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of 40 CFR 63.167. (40 CFR 63.167(d) as referenced by 40 CFR 63.502(a))

6) Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 63.167(a) through (c) are exempt from the requirements of 40 CFR 63.167(a) through (c). (40 CFR 63.167(e) as referenced by 40 CFR 63.502(a))

ix. If an instrument reading of 500 parts per million or greater above background level, using the method as specified in 40 CFR 63.180(b) and (c), is measured when monitoring instrumentation systems and pressure relief devices in liquid service, then a leak is detected. (40 CFR 63.169(b) as referenced by 40 CFR 63.502(a))

x. Compliance with the equipment leak standard will be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182 of 40 CFR Part 63 Subpart H, review of performance test results, and by inspections. (40 CFR 63.162(a) as referenced by 40 CFR 63.502(a))

xi. Each piece of equipment in a process unit to which the equipment leak standard applies shall be identified such that it can be distinguished readily from equipment that is not subject to the equipment leak standard.

Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process unit boundaries by some form of weatherproof identification. Equipment that is in vacuum service is excluded form the requirements of the equipment leak standard. Equipment that is in organic hazardous air pollutant service less than 300 hours per calendar year is excluded from the requirements of 40 CFR 63.163 through 63.174 and 40 CFR 63.178 of the equipment leak standard if it is identified as required in 40 CFR 63.181(j) of the standard. (40 CFR 63.162(c) through (e), as referenced by 40 CFR 63.502(a))

xii. When each leak is detected as specified in 40 CFR 63.163 and 40 CFR 63.164; 40 CFR 63.168 and 40 CFR 63.169; and 40 CFR 63.172 through 40 CFR 63.174, clearly identify the leaking equipment. The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D) of 40 CFR Part 63 Subpart H, and no leak has been detected during the follow-up monitoring. If the owner or operator elects to comply using the provisions of 40 CFR 63.174(c)(1)(i) of 40 CFR Part 63 Subpart H, the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of 40 CFR 63.174(c)(1)(i), may be removed after it is repaired. (40 CFR 63.162(f)(1) through (3), as referenced by 40 CFR 63.502(a))

xiii. All terms in the equipment leak standard that define a period of time for completion of required tasks (such as weekly, monthly, quarterly, or annual), refer to the standard calendar periods unless specified otherwise in the section or subsection of the standard that imposes the requirement. However, if the initial compliance date does not coincide with the beginning of the standard calendar period, an owner or operator may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of 40 CFR 63.162(g)(2) or (g)(3). (40 CFR 63.162(g), as referenced by 40 CFR 63.502(a))

xiv. In all cases where the provisions of the equipment leak standard require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of the equipment leak standard to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of the equipment leaks standard. However, if the repairs are unsuccessful, a leak is detected and the owner or operator shall take further action as required by applicable provisions of the equipment leak standard. (40 CFR 63.162(h), as referenced by 40 CFR 63.502(a))

xv. The owner or operator may delay the repair of equipment for which leaks have been detected if repair within 15 days is technically infeasible without a process unit shutdown. The owner or operator shall repair such equipment by the end of the next process unit shutdown. The owner or operator may delay the repair of equipment for which leaks have been detected if the equipment is isolated from the process and does not remain in organic HAP service. The owner or operator may delay repair of valves, connectors, and agitators for which leaks have been detected if the owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 63.172. The owner or operator may delay repair of pumps if (1) repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of 40 CFR 63.176(d) will provide better performance or, a dual mechanical seal system that meets the requirements of 40 CFR 63.163(e), or a pump that meets the requirements of 40 CFR 63.163(f), or a closed-vent system and control device that meets the requirements of 40 CFR 63.163(g); and (2) repair is completed as soon as practicable, but not later than 6 months after the leak was detected. For valves, the owner or operator may delay repair beyond a process unit shutdown if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair for such valves beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown. (40 CFR 63.171, as referenced by 40 CFR 63.502(a))

xvi. Enclosed combustion devices shall be designed and operated to reduce the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760$^{o}$C. Note, 760$^{o}$C is 1400$^{o}$F. Demonstrating compliance with the destruction efficiency of 99.5% in Additional Condition 1.a.iii. also demonstrates compliance with this efficiency. (40 CFR 63.172(c) as referenced by 40 CFR 63.502(a)) (See Comment 14)

xvii. Flares used to comply with the LDAR requirements of 40 CFR 63 Subpart U, which references 40 CFR 63 Subpart H, shall comply with the requirements of 40 CFR 63.11(b). (40 CFR 63.172(d) as referenced by 40 CFR 63.502(a)) (See Comment 22)

xviii. Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of 40 CFR 63 Subpart H,

such system or control device shall be operating. (40 CFR 63.172(m) as referenced by 40 CFR 63.502(a))

xix. Surge Control Vessels and Bottom Receivers described in 40 CFR 63.502(b)(1) through (b)(7) are exempt from the requirements contained in 40 CFR 63.170. (40 CFR 63.502(b))

d. **VOC**

i. For Storage Vessels (T-2, T-2A, T-2B, T-2C, T-3, T-4, T-4A, T-4B, T-4C, and T-1), each of which has a storage capacity greater than 40,000 gallons, if the true vapor pressure of the volatile organic compounds, as stored, is equal to or greater than 1.5 psia (78 mm Hg), but not greater than 11.1 psia (570 mm Hg), the storage vessel shall be equipped with a floating roof, a vapor recovery system or their equivalents. The District has determined the Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE) to be equivalent to a vapor recovery system. All of the storage vessels except T-1 are equipped to be vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), as needed based on true vapor pressure, as stored. Storage Vessel T-2, when not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), and Storage Vessel T-1 shall only store volatile organic compounds that have a true vapor pressure of less than 1.5 psia, as stored. (Regulations 6.13 and 7.12, section 3.1) (See Comment 22)

ii. For storage vessels (T-15M, T-15T, T-32, Day Tank 2, Day Tank 3, Day Tank 4, Day Tank 5, Day Tank 6, T-11M, T-12M, T-13M, T-13T, T-14, and D-3), each of which has a storage capacity greater than 250 gallons but less than or equal to 40,000 gallons, if the true vapor pressure of the volatile organic compounds, as stored, is equal to or greater than 1.5 psia, as a minimum the storage vessel shall be equipped with a permanent submerged fill pipe. True vapor pressure “as stored” shall be determined on an instantaneous basis under conditions representing expected worst case conditions. All of the storage vessels are equipped with submerged fill. (Regulations 6.13 and 7.12, section 3.3) (See Comments 18 and 21)

iii. For Emission Points (Truck Staining Oil Loading/Unloading (when loading), Railcar Staining Oil Loading/Unloading (when loading), Railcar Loading and Railcar Solvent Loading);

1) The owner or operator of any loading facility from which more than 200 gallons but less than 20,000 gallons of “volatile organic materials” are loaded in any one day shall not load any volatile organic materials into any tank, truck, trailer, or railroad car from any loading facility unless such loading is accomplished by submerged fill, bottom loading, or equivalent methods approved by the District. Pneumatic, hydraulic, or other mechanical means shall be provided

to prevent liquid organic compounds drainage from the loading device when it is removed from the hatch, or to accomplish complete drainage before such removal. "Volatile organic material" means any volatile organic compound which has a true vapor pressure of 78 mm Hg (1.5 psia) or greater under actual storage conditions. Each Emission Point, when loading, is submerged fill/bottom loaded. (Regulation 6.22, section 3.1) (See Comment 16)

2) The owner or operator of any loading facility from which 20,000 gallons or more of "volatile organic materials" are loaded in any one day shall not load any volatile organic materials into any tank, truck, trailer, or railroad car from any loading facility unless such loading facility is equipped with a device which reduces the emissions of all hydrocarbon vapors and gases by at least 90% by weight, and which is properly installed, in good working order, and in operation. Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor recovery system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. (Regulation 6.22, section 3.2) (See Comment 16)

a) For Emission Points (Truck Staining Oil Loading/Unloading (when loading), Railcar Staining Oil Loading/Unloading (when loading) and Railcar Loading (when operated as a closed system), each of which is a closed system, the District has determined each meets the minimum 90% emission reduction by weight requirement.

b) For Emission Point (Railcar Loading (when not being operated as a closed system and is being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE)), the District has determined operating this Emission Point with the Flare Thermal Oxidizer and/or the Flare Control System meets the minimum 90% emission reduction by weight requirement.

c) For Emission Point (Railcar Solvent Loading), which has no control, this Emission Point shall either be operated as a closed system or load only "non-volatile organic materials".

iv. For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, D-32, D-15, C-7, D-9, D-13, C-1, D-10, D-17, D-18, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, Reactor 1 through Reactor 13, D-24, D-25, D-26, D-27, D-28,

D-29, T-5A, T-5B, T-5C, T-5D, T-5E, No. 1 Stripper Vessels, and No. 2 Stripper Vessels), the owner or operator shall limit VOC emissions from each emission point to less than or equal to 40 lbs/day and 8 lbs/hr for Class II solvents and less than or equal to 3000 lbs/day and 450 lb/hr for Class III solvents, unless VOC emissions are reduced by at least 85% by weight.(Regulation 6.24, section 3.2 and 3.3)

1) For Emission Points (D-32, D-15, D-18, D-7, D-28, D-29, T-5A, T-5B, T-5C, T-5D and T-5E) that are controlled by the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), each of which the District has determined meets the 85% by weight reduction requirement for these Emission Points. (See Comment 22)

2) For Emission Points (D-13, D-1, D-39, D-5, D-38A, D-38B, D-6, and D-8), the owner or operator shall limit VOC emissions from each emission point to less than or equal to 40 lbs/day and 8 lbs/hr for Class II solvents and less than or equal to 3000 lbs/day and 450 lb/hr for Class III solvents.

3) For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, C-7, D-9, C-1, D-10, D-17, Reactor 1 through Reactor 13, D-24, D-25, D-26, D-27, No. 1 Stripper Vessels, and No. 2 Stripper Vessels), there are no VOC standards. These emission points are closed or closed pressurized systems that do not vent to the atmosphere.

v. For Emission Points (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), the exhaust gases from the Finishing Building shall be ducted to one or both of the two operating coal-fired boilers (C-U1/U2-BLR1/2) or to the Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1). The overall control efficiency (capture and control) of the VOCs from the Finishing Building processes shall be at least 80%. The District has determined the capture efficiency to be a minimum of 90%. (Regulation 6.43, section 7.1 and 7.2)

vi. For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, D-16M, C-2, D-16, X-2T, C-2T, D-16T, D-59M, C-1A, D-10A, C-1T, D-10T, D-17T, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-28M, D-25T, D-26T, D-28T, D-64M, T-5F, T-5G, T-5H, T-5J, T-5K, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, D-30, D-30M, D-30T, T-9A, T-9B, T-9C, T-9D, T-9E/T, No. 1 Line, No. 2 Line, No. 3 Line,

No. 4 Line, No. 5 Line, and Heat Cleaning Oven), the owner or operator shall utilize VOC BACT. (Regulation 7.25, section 3)

1) For Emission Points (D-16M, D-16, D-16T, D-59M, D-10T (when not operating as a closed system and venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-18T, C-9M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28T, D-64M, T-5F, T-5G, T-5H, T-5J, and T-5K), the owner or operator shall vent the emissions from these Emission Points to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), each of which the District has determined to be VOC BACT for the purposes of Regulation 7.25. (Regulation 7.25, section 3.1)

2) For Emission Points (D-30, D-30M, D-30T, No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), these emission points are controlled by stripping technology, which is considered VOC BACT. (Regulation 7.25, section 3.1) (See Comment 23)

3) For Emission Points (D-44, D-44M and D-45M), the owner or operator shall not allow the combined VOC emissions to exceed one ton per year. The owner or operator shall meet the MACT requirements applicable to these emission points in order to meet the Regulation 7.25 VOC BACT requirement. (Regulation 7.25, section 3.1)

4) For Emission Point (Heat Cleaning Oven), the owner or operator shall not allow the VOC emissions to exceed one ton per year. (Regulation 7.25, section 3.1)

5) For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, C-2, X-2T, C-2T, C-1A, D-10A, C-1T, D-10T (when operating as a closed system and not venting directly to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE)), D-17T, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-25T, D-26T, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D, and T-9E/T), these emission points are closed or closed pressurized systems. There are thus no VOC BACT requirements for Regulation 7.25. (Regulation 7.25, section 4)

vii. For Emission Points (No. 1 Line, No. 4 Line, and No. 5 Line), the owner or operator shall limit the VOC emissions from each finishing line to 135 tons per 12 consecutive month period and 12.27 tons per month. (Construction Permit # 23-88-C, dated March 16, 1988; Construction Permit # 116-89-C, dated May 1, 1989; Banking Permit 168-94-B, dated April 1, 1994;

Construction Permit # 354-94-C, dated June 1, 1994; Construction Permit # 58-95-C, dated March 10, 1995) (See Comment 17)

e. **PM**

i. For Emission Point (BU-1T), the owner or operator shall not allow PM emissions to exceed 5.08 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 21)

ii. For Emission Point (Heat Cleaning Oven), the owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2)

f. **Opacity**

For Emission Points (BU-1T and Heat Cleaning Oven), the owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

g. **TAP**

i. For Emission Point (Railcar Loading (when not operated as a Closed System and being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), each of the Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE) has been determined by the District to meet the RACT requirements of Regulation 5.11. (Regulation 5.11, section 1)

ii. For Emission Point (Railcar Solvent Loading and Heat Cleaning Oven), the owner or operator shall not allow or cause the TAP emissions to exceed the adjusted significant level (ASL) value, unless modeling or a RACT/BACT analysis has been submitted and approved by the District. When the Railcar Solvent Loading is operated as a closed system, there are no applicable TAP standards. (Regulations 5.11 and 5.12, section 1)

iii. For all Emission Points subject to Regulation 5.11 or 5.12 that emit the THF (tetrahydrofuran) TAP, the owner or operator shall not allow or cause the TAP emissions to exceed the adjusted significant level (ASL) value, unless modeling or a RACT/BACT analysis has been submitted and approved by the District. (Regulations 5.11 and 5.12, section 1) (See Comment 20)

f. **Fuel**

i. The supplemental fuel for the Flare Thermal Oxidizer (C-FLARE TO) shall be natural gas. (Construction Permit 112-04-C, dated August 31, 2004)

ii. The supplemental fuel for Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) shall be natural gas. (Construction Permit 204-02-C, dated October 15, 2002)

g. **District Regulation 5.15 Regulated Substance** (40 CFR Part 68, Subpart G)

The owner or operator shall comply with the Risk Management Plan submitted to the District and to the U.S. E.P.A. (See Off-Permit Documents Section of this permit)

2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

a. **1,3-Butadiene**

i. The combustion temperature of the Flare Thermal Oxidizer, C-FLARE TO, shall be monitored. The combustion temperature monitoring device shall be equipped with a continuous recorder. See Additional Condition 2.b.viii.1) (Construction Permit 112-04-C, dated August 31, 2004)

ii. The owner or operator shall establish, through required performance testing, a minimum combustion temperature that assures a minimum 99.5% emission destruction efficiency for C-FLARE TO. (Construction Permit 112-04-C, dated August 31, 2004)

iii. The owner or operator shall not exceed the maximum gas flow (process vent stream plus the combustion air) at a rate to be determined during the stack test. The owner or operator shall continuously monitor the gas flow (process vent stream plus the combustion air) in order to ensure compliance with the 0.50 second residence time. The owner or operator shall be allowed a maximum of 7.3 hours per month for gas flow monitor downtime. (Construction Permit 112-04-C, dated August 31, 2004)(See Comment 2)

iv. The owner or operator shall install, calibrate, and maintain a redundant monitoring instrumentation system for the Flare Thermal Oxidizer that will operate in the event of a malfunction of the primary monitoring instrumentation system, to include monitoring of the combustion temperature and gas flow rate. (Construction Permit 112-04-C, dated August 31, 2004)

v. The owner or operator shall maintain the spare parts recommended by the manufacturer of the Flare Thermal Oxidizer (C-FLARE-TO). (Construction Permit 112-04-C, dated August 31, 2004)

b. **HAP (Non-LDAR)**

i. For Group 2 storage vessels (T-3 and T-1), See Additional Condition 3.b.i.

ii. For Emission Points (T-2, Day Tank 4, Day Tank 5, and Day Tank 6, when each is not being used as a Surge Control Vessel and is being used to store

styrene), these tanks are exempt from the provisions of 40 CFR 63.484. There are thus no HAP Non-LDAR compliance monitoring requirements. (40 CFR 63.484(b)(5))

iii. For Group 1 Continuous Front-End Process Vents (D-16M, D-16, D-16T, and D-10T (when venting directly to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE) and not being operated as a closed system)), see Additional Condition 3.b.iii.

iv. For Group 2 Continuous Front-End Process Vents with a TRE greater than 1.0 but less than or equal to 4.0 (T-5A, T-5B, T-5C, T-5D, T-5E, T-5F, T-5G, T-5H, T-5J, and T-5K), see Additional Condition 2.b.iii. The owner or operator has elected to consider these Emission Points as Group 1 Continuous Front-End Process Vents per 40 CFR 63.115(d)(1)(ii) as referenced by 40 CFR 63.485.

v. For Group 2 Continuous Front-End Process Vents with a TRE greater than 4.0 (D-59M, D-32, D-15, D-13, D-18, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28, D-28T, D-64M, D-29, D-30, D-30M, and D-30T), there are no HAP Non-LDAR compliance monitoring requirements.

vi. For Surge Control Vessels (T-2 (when used as a surge control vessel), T-2A, T-2B, T-2C, T-4, T-4A, T-4B, T-4C, T-15M, T-15T, T-32, Day Tank 2, Day Tank 3, Day Tank 4 (when used as a surge control vessel), Day Tank 5 (when used as a surge control vessel), and Day Tank 6 (when used as a surge control vessel)), there are no HAP Non-LDAR compliance monitoring requirements. (See Comment 11)

vii. For Closed System or Closed Pressurized System Emission Points (X-2M, C-2M, X-2, C-2, X-2T, C-2T, C-7, D-9, C-1, D-10, C-1A, D-10A, C-1T, D-10T (when operated as a closed system and not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-17, D-17T, Reactor 1 through Reactor 13, Reactor 14, D-24, D-24M, D-24T, D-25M, D-26M, D-25, D-26, D-27, D-25T, D-26T, No. 1 Stripper Vessels, No. 2 Stripper Vessels, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D, and T-9E/T), there are no HAP Non-LDAR compliance monitoring requirements.

viii. When the Flare Thermal Oxidizer (C-FLARE TO) is being used to comply with the Non-LDAR requirements of 40 CFR Part 63 Subpart U, the following monitoring requirements apply to this control device. (See Comments 12 and 13)

1) Each owner or operator of a Continuous Front-End Process Vent that uses a combustion device to comply with the requirements in

§63.113(a)(2) shall install the following monitoring equipment. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. (40 CFR 63.114(a) as referenced by 40 CFR 63.485(a))

When an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required. (40 CFR 63.114(a)(1) as referenced by 40 CFR 63.485(a))

Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. (40 CFR 63.114(a)(1)(i) as referenced by 40 CFR 63.485(a))

2) The owner or operator shall establish a range that indicates proper operation of the control device for each parameter monitored under §63.114(a). Per Table 7 to Subpart U of 40 CFR Part 63, the established operating parameter monitoring level is minimum temperature. The owner or operator will establish this minimum temperature through the required performance testing. A minimum temperature for the Flare Thermal Oxidizer will be 1400°F, and it will be used until the minimum temperature is so established. (40 CFR 63.114(e) as referenced by 40 CFR 63.485(a))

3) The owner or operator shall comply with the provisions of §63.505 for establishing the parameter monitoring level for the purposes of 40 CFR Part 63 Subpart U. (40 CFR 63.485(k))

The owner or operator of a control device that has one or more parameter monitoring level requirements specified under 40 CFR Part 63 Subpart U shall establish a maximum or minimum level for each measured parameter. If a performance test is required by Subpart U for a control device, the owner or operator shall use the procedures in either §63.505(b) or (c) to establish the parameter monitoring levels. (40 CFR 63.505(a))

a) The owner or operator shall operate control devices such that the daily average of monitored parameters remains above the minimum established level or below the maximum established level, except as otherwise stated in 40 CFR Part 63 Subpart U. The continuous temperature monitoring in Additional Condition 2.a.i. also demonstrates compliance with this requirement. (40 CFR 63.505(a)(1))

b) As specified in §63.506(e)(5), all established levels, along with their supporting documentation and the definition of an operating day, shall be submitted as part of the Notification of Compliance Status. (40 CFR 63.505(a)(2)) (See Comment 9)

c) Nothing in §63.505 shall be construed to allow a monitoring parameter excursion caused by an activity that violates other applicable provisions of 40 CFR Part 63 Subparts A, F, G, or H. (40 CFR 63.505(a)(3))

ix. When the Flare Control System (C-FLARE) is being used to comply with the Non-LDAR requirements of 40 CFR Part 63 Subpart U, the following monitoring requirements apply to this control device. (See Comment 13)

1) The owner or operator of a Continuous Front-End Process Vent that uses a combustion device to comply with the requirements in 40 CFR 63.113(a)(1) shall install the following monitoring equipment. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. (40 CFR 63.114(a) as referenced by 40 CFR 63.485(a))

Where a flare is used, the following monitoring equipment is required, a device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame. (40 CFR 63.114(a)(2) as referenced by 40 CFR 63.485(a))

2) The flare shall be operated with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater. The net heating value of the gas being combusted in the flare shall be calculated using the following equation: (40 CFR 63.11(b)(6)(ii))

$$H_T = K\sum_{i=1}^{n} C_i H_i$$

Where:
$H_T$ = Net Heating Value of the sample, MJ/scm (Btu/scf); where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mmHg, but the standard temperature for determining the volume corresponding to one mole is 20°C.
K = Constant = $1.740 \times 10^{-7}$ (1/ppmv)(g-mole/scm)(MJ/kcal); where the standard temperature for (g-mole/scm) is 20°C.

$C_i$ = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 or Method 25A (if the requirements of 40 CFR 63.502(j)(1) and (j)(2) are met) (40 CFR 63.502(j)) and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994)(incorporated by reference as specified in 40 CFR 63.14)
$H_i$ = Net heat of combustion of sample component i, kcal/g-mole at 25°C and 760 mmHg. The heats of combustion may be determined by using ASTM D2382-76 or 88 or D4809-95 if published values are not available or cannot be calculated.
n = number of sample components

3) The flare shall be operated with an exit velocity less than 18.3 m/sec (60 ft/sec). The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate of gas being combusted by the unobstructed (free) cross-sectional area of the flare tip. (40 CFR 63.11(b)(7)(i))

4) The owner or operator shall conduct a monthly visible emissions test (EPA Reference Method 22 in Appendix A of Part 60).

x. For Back-End process operations (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), the owner or operator uses stripping technology in accordance with 40 CFR 63.495. When stripping technology alone does not result in meeting the applicable residual organic HAP limitation, the combination of stripping technology and a control device (either one or both of the existing coal-fired boilers (C-U1/U2-BLR1/2) or the Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1)) is used to comply with the residual organic HAP limitation in Additional Condition 1.b.x. (See Comments 6 and 7)

1) The owner or operator shall determine the monthly weighted average residual organic HAP content for each month in which any portion of the back-end of an elastomer production process is in operation. A single monthly weighted average shall be determined for all back-end process operations at the affected source. (40 CFR 63.495(a))

2) Periodic sampling procedures have been chosen in lieu of stripper parametric monitoring for demonstrating compliance.

a) The sample shall be a sample of crumb rubber taken as soon as safe and feasible after the stripping operation, but no later than the entry point for the first unit operation following the stripper. (40 CFR 63.495(b)(1) and 40 CFR 63.495(d)(2))

b) The frequency of the sampling shall be at least one representative sample is to be taken each operating day. The sample is to be taken at the location specified in Additional Condition 2.b.x.2)a), and identified by elastomer type and by the date and time the sample was taken. (40 CFR 63.495(b)(2)(ii))

c) The residual organic HAP content in each sample shall be determined using either Method 313a or 313b of 40 CFR 63, Appendix A for either styrene-butadiene or polybutadiene rubber production by solution process. (40 CFR 63.495(b)(3), 40 CFR 63.495(e)(2), and 40 CFR 63.495(e)(3))

d) The quantity of material (weight of latex or dry crumb rubber) represented by each sample shall be recorded. Acceptable methods of determining this quantity are production records, measurement of stream characteristics, and engineering calculations. (40 CFR 63.495(b)(4))

e) The monthly weighted average shall be determined using the following equation and all samples taken and analyzed during the month shall be used in the determination of the monthly weighted average, except samples taken during periods of start-up, shutdown, or malfunction: (40 CFR 63.495(b)(5) and 40 CFR 63.495(f))

$$HAPCONT_{avg,mo} = \frac{\sum_{i=1}^{n} (C_i)(P_i)}{P_{mo}}$$

Where:

$HAPCONT_{avg,mo}$ = Monthly weighted average organic HAP content for all rubber processed at the affected source, kg organic HAP per Mg latex or dry crumb rubber.
n = Number of samples in the month.
$C_i$ = Residual organic HAP content of sample i, determined in accordance with Additional Condition 2.b.x.2)c), kg organic HAP per Mg latex or dry crumb rubber.
$P_i$ = Weight of latex or dry crumb rubber represented by sample i.
$P_{mo}$ = Weight of latex or dry crumb rubber (Mg) processed in the month.

3) If stripping technology alone does not result in meeting the residual organic HAP limitation in Additional Condition 1.b.x., and the combination of the stripping technology and one or both of the coal fired boilers, or the Regenerative Thermal Oxidizer (RTO-1), is used, the outlet emissions shall be calculated using the following equation: (40 CFR 63.496(b)(8)) (See Comments 6 and 8)

$$E_o = E_i(1 - R)$$

where:
$E_o$ = Mass rate of total organic HAP at the outlet of the control or recovery device, dry basis, kg/hr.
$E_i$ = Mass rate of total organic HAP at the inlet of the control or recovery device, dry basis, kg/hr, determined using the procedures in 40 CFR 63.496(b)(5)(iv).
R = Control efficiency of control device (nominal 98% efficiency for one or both of the coal fired boilers per 40 CFR 63.496(b)(8)(ii) and 99.56% efficiency for the Regenerative Thermal Oxidizer RTO-1 based on performance testing) (See Comment 8)

4) If stripping technology alone does not result in meeting the residual organic HAP limitation in Additional Condition 1.b.x., and the combination of stripping technology and the Regenerative Thermal Oxidizer RTO-1 is used to meet the limitation, the owner or operator shall continuously monitor the combustion temperature of the Regenerative Thermal Oxidizer RTO-1 when it is being used. The minimum daily average temperature shall be 1413°F. RTO-1 is only considered an incinerator for the purposes of 40 CFR 63.497, based on the 40 CFR 63.111 definition of an incinerator. RTO-1 is not considered an incinerator for other regulatory purposes. (40 CFR 63.497(a)(1)) (See Comments 8 and 12)

5) An owner or operator complying with the residual organic HAP limitation in Additional Condition 1.b.x. using a control device, shall redetermine the compliance status through the requirements described in 40 CFR 63.496(b) whenever process changes are made. For the purposes of Additional Condition 2.b.x., a process change is any action that would reasonably be expected to impair the performance of the control device. For the purposes of Additional Condition 2.b.x., the production of an elastomer with a residual organic HAP content greater than the residual organic HAP content of the elastomer used in the compliance demonstration constitutes a process change, unless the overall effect of the change is to reduce organic HAP emissions from the source as a whole. Other examples of process changes may include changes in production capacity or production rate, or removal or addition of equipment. For the purposes of this paragraph, process changes do not include: Process

upsets; unintentional, temporary process changes; or changes that reduce the residual organic HAP content of the elastomer. (40 CFR 63.496(d))

6) The owner or operator shall properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in §63.498(d)(5)(iii). The flow indicator shall be installed at the entrance to any by-pass line that could divert the vent stream away from the control device to the atmosphere. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph. (40 CFR 63.497(d) and (d)(1))

xi. For heat exchange systems, the cooling water shall be monitored for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. (40 CFR 63.104(b) as referenced by 40 CFR 63.502(n))

1) The cooling water shall be monitored quarterly to detect leaks. (40 CFR 63.502(n)(6) and 40 CFR 63.104(b)(1) as referenced by 40 CFR 63.502(n))

2) a) For recirculating heat exchange systems (cooling tower systems), the monitoring of speciated hazardous air pollutants or total hazardous air pollutants refers to the organic hazardous air pollutants listed in table 5 of 40 CFR 63 Subpart U. (40 CFR 63.502(n)(3) and 40 CFR 63.104(b)(2) as referenced by 40 CFR 63.502(n))

b) For once-through heat exchange systems, the monitoring of speciated hazardous air pollutants or total hazardous air pollutants refers to the organic hazardous air pollutants listed in table 5 of 40 CFR 63 Subpart U. (40 CFR 63.502(n)(3) and 40 CFR 63.104(b)(2)(ii) as referenced by 40 CFR 63.502(n))

3) The concentration of the monitored substance(s) in the cooling water shall be determined using any EPA-approved method listed in 40 CFR 136 as long as the method is sensitive to concentrations as low as 10 parts per million and the same method is used for both entrance and exit samples. Alternative methods may be used upon approval by the Administrator. (40 CFR 63.104(b)(3) as referenced by 40 CFR 63.502(n))

4) The samples shall be collected either at the entrance and exit of each heat exchange system or at locations where the cooling water enters

and exits each heat exchanger or any combination of heat exchangers. (40 CFR 63.104(b)(4) as referenced by 40 CFR 63.502(n))

a) For samples taken at the entrance and exit of recirculating heat exchange systems, the entrance is the point at which the cooling water leaves the cooling tower prior to being returned to the process equipment and the exit is the point at which the cooling water is introduced to the cooling tower after being used to cool the process fluid. (40 CFR 63.104(b)(4)(i) as referenced by 40 CFR 63.502(n))

b) For samples taken at the entrance and exit of once-through heat exchange systems, the entrance is the point at which the cooling water enters and the exit is the point at which the cooling water exits the plant site or elastomer product process units. (40 CFR 63.104(b)(4)(ii) as referenced by 40 CFR 63.502(n))

c) For samples taken at the entrance and exit of each heat exchanger or any combination of heat exchangers in elastomer product process units, the entrance is the point at which the cooling water enters the individual heat exchanger or group of heat exchangers and the exit is the point at which the cooling water exits the heat exchanger or group of heat exchangers. (40 CFR 63.104(b)(4)(iii) as referenced by 40 CFR 63.502(n))

5) A minimum of three sets of samples shall be taken at each entrance and exit as defined in Additional Condition 2.b.xi.4). The average entrance and exit concentrations shall then be calculated. The concentration shall be corrected for the addition of any makeup water or for any evaporative losses, as applicable. (40 CFR 63.104(b)(5) as referenced by 40 CFR 63.502(n))

xii. For heat exchange systems, if a leak is detected according to the criteria of Additional Condition 1.b.xi., the owner or operator shall comply with the requirements in Additional Conditions 2.b.xii.1) and 2.b.xii.2), except as provided in Additional Condition 2.b.xiii. (40 CFR 63.104(d) as referenced by 40 CFR 63.502(n))

1) The leak shall be repaired as soon as practical but not later than 45 calendar days after the owner or operator receives results of monitoring tests indicating a leak. The leak shall be repaired unless the owner or operator demonstrates that the results are due to a condition other than a leak. (40 CFR 63.104(d)(1) as referenced by 40 CFR 63.502(n))

2) Once the leak has been repaired, the owner or operator shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. (40 CFR 63.104(d)(2) as referenced by 40 CFR 63.502(n))

xiii. Delay of repair of heat exchange systems for which leaks have been detected is allowed if the equipment is isolated from the process. Delay of repair is also allowed if repair is technically infeasible without a shutdown and any one of the conditions in Additional Condition 2.b.xiii.1) or 2.b.xiii.2) is met. All time periods in Additional Conditions 2.b.xiii.1) and 2.b.xiii.2) shall be determined from the date when the owner or operator determines that delay of repair is necessary. (40 CFR 63.104(e) as referenced by 40 CFR 63.502(n))

1) If a shutdown is expected within the next 2 months, a special shutdown before that planned shutdown is not required. (40 CFR 63.104(e)(1) as referenced by 40 CFR 63.502(n))

2) If a shutdown is not expected within the next 2 months, the owner or operator may delay repair as provided in Additional Conditions 2.b.xiii.2)a) and 2.b.xiii.2)b). Documentation of a decision to delay repair shall state the reasons repair was delayed and shall specify a schedule for completing the repair as soon as practical. (40 CFR 63.104(e)(2) as referenced by 40 CFR 63.502(n))

a) If a shutdown for repair would cause greater emissions than the potential emissions from delaying repair, the owner or operator may delay repair until the next shutdown of the process equipment associated with the leaking heat exchanger. The owner or operator shall document the basis for the determination that a shutdown for repair would cause greater emissions than the emissions likely to result from delaying repair as specified in Additional Conditions 2.b.xiii.2)a)(A) and 2.b.xiii.2)a)(B). (40 CFR 63.104(e)(2)(i) as referenced by 40 CFR 63.502(n))

(A) The owner or operator shall calculate the potential emissions from the leaking heat exchanger by multiplying the concentration of total organic hazardous air pollutants listed in table 5 of 40 CFR 63 Subpart U in the cooling water from the leaking heat exchanger by the flowrate of the cooling water from the leaking heat exchanger by the expected duration of the delay. The owner or operator may calculate potential emissions using total organic carbon concentration instead of total organic hazardous air pollutants listed in table 5 of 40 CFR 63 Subpart U.

(40 CFR 63.104(e)(2)(i)(A) as referenced by 40 CFR 63.502(n))

(B) The owner or operator shall determine emissions from purging and depressurizing the equipment that will result from the unscheduled shutdown for the repair. (40 CFR 63.104(e)(2)(i)(B) as referenced by 40 CFR 63.502(n))

b) If repair is delayed for reasons other than those specified in Additional Condition 2.b.xiii.2)a), the owner or operator may delay repair up to a maximum of 120 calendar days. The owner shall demonstrate that the necessary parts or personnel were not available. (40 CFR 63.104(e)(2)(ii) as referenced by 40 CFR 63.502(n))

c. **HAP (LDAR)**

40 CFR 63 Subpart H, as modified by 40 CFR 63 Subpart U, applies in its entirety to Emission Unit U1/U2. Specific LDAR requirements are included in this permit based on the operational information provided by the company.

i. The owner or operator of a process unit subject to 40 CFR 63 Subpart H shall monitor each pump in light liquid service monthly to detect leaks by the method specified in 40 CFR 63.180(b) and shall comply with the requirements of 40 CFR 63.163(a) through (d), except as provided in 40 CFR 63.162(b) and 40 CFR 63.163(e) through (j). (40 CFR 63.163(b)(1) as referenced by 40 CFR 63.502(a)) (See Comment 15)

ii. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. Indications of liquids dripping, as defined in 40 CFR 63 Subpart H, from bleed ports in pumps and agitator seals in light liquid service, shall not be considered a leak. A "bleed port" is a technologically-required feature of the pump or seal whereby polymer fluid used to provide lubrication and/or cooling of the pump or agitator shaft exits the pump, thereby resulting in a visible dripping of fluid. (40 CFR 63.163(b)(3) as referenced by 40 CFR 63.502(a) and 63.502(d)(1)) (See Comment 15)

1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.163(c)(3) or 40 CFR 63.171. (40 CFR 63.163(c)(1) as referenced by 40 CFR 63.502(a))

2) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not

limited to, the following practices where practicable. (40 CFR 63.163(c)(2) as referenced by 40 CFR 63.502(a))

a) Tightening of packing gland nuts. (40 CFR 63.163(c)(2)(i) as referenced by 40 CFR 63.502(a))

b) Ensuring that the seal flush is operating at design pressure and temperature. (40 CFR 63.163(c)(2)(ii) as referenced by 40 CFR 63.502(a))

3) For pumps in Phase III to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected. (40 CFR 63.163(c)(3) as referenced by 40 CFR 63.502(a))

4) The owner or operator shall continue to calculate percent leaking pumps on a source-wide basis, as was determined by the owner or operator no later than the first monitoring period and reported in the first Periodic Report for Equipment Leaks required by 40 CFR 63.182 as referenced by 40 CFR 63.506(e)(6). If, in Phase III and calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the owner or operator shall implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.l76. The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only. (40 CFR 63.163(d)(1) through (3) as referenced by 40 CFR 63.502(a))

5) Percent leaking pumps shall be determined by the following equation: (40 CFR 63.163(d)(4) as referenced by 40 CFR 63.502(a))

$$\%PL=((PL-PS)/(PT-PS))\times 100$$

where:

%PL=Percent leaking pumps
PL=Number of pumps found leaking as determined through monthly monitoring as required in 40 CFR 63.163(b)(1) and (b)(2).
PT=Total pumps in organic HAP service, including those meeting the criteria in 40 CFR 63.163(e) and (f).
PS=Number of pumps leaking within 1 month of start-up during the current monitoring period.

6) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.162(a) through (d), provided the following requirements are met: (40 CFR 63.163(e) as referenced by 40 CFR 63.502(a))

a) Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equipped with a closed-loop system that purges the barrier fluid into a process stream. (40 CFR 63.163(e)(1) as referenced by 40 CFR 63.502(a))

b) The barrier fluid shall not be in light liquid service. (40 CFR 63.163(e)(2) as referenced by 40 CFR 63.502(a))

c) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (40 CFR 63.163(e)(3) as referenced by 40 CFR 63.502(a))

d) Each pump equipped with such a dual mechanical seal system and barrier fluid system shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 63.180(b) to determine if there is a leak of organic hazardous air pollutant(s) into the barrier fluid. If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected. (40 CFR 63.163(e)(4) as referenced by 40 CFR 63.502(a))

e) Each sensor shall be observed daily or equipped with an alarm unless the pump is located within the boundary of an unmanned plant site. (40 CFR 63.163(e)(5) as referenced by 40 CFR 63.502(a))

f) The owner or operator shall determine, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. If indications of liquids dripping from the pump seal exceed these established criteria, or if, based on the criteria, the sensor indicates failure of the seal system, the barrier fluid

system, or both, a leak is detected. When a leak is detected, the owner or operator shall repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.163(e)(6) as referenced by 40 CFR 63.502(a))

7) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of 40 CFR 63.163(a) through (c). (40 CFR 63.163(f) as referenced by 40 CFR 63.502(a))

8) Any pump that is designated as an unsafe-to-monitor pump, as described in 40 CFR 63.181(b)(7)(i), is exempt from the requirements of 40 CFR 63.163(b) through (e) if the owner or operator of the pump determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d), and the owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. (40 CFR 63.163(j), including all subparagraphs, as referenced by 40 CFR 63.502(a))

iii. Any compressor that is designated, as described in 40 CFR 63.181(b)(2)(ii), to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of 40 CFR 63.164(a) through (h) if the compressor is tested for compliance with 40 CFR 63.164(i)(1) initially upon designation, annually, and at other times requested by the Administrator. (40 CFR 63.164(i)(2) as referenced by 40 CFR 63.502(a))

iv. The owner or operator shall monitor valves in gas/vapor and/or in light liquid service for leaks at the intervals specified below: (40 CFR 63.168 as referenced by 40 CFR 63.502(a))

1) At process units with 2 percent or greater leaking valves, calculated according to 40 CFR 63.168(e), the owner or operator shall monitor each valve once per month. (40 CFR 63.168(d)(1)(i) as referenced by 40 CFR 63.502(a))

2) At process units with less than 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in 40 CFR 63.168(d)(3) and (d)(4). (40 CFR 63.168(d)(2) as referenced by 40 CFR 63.502(a))

3) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters. (40 CFR 63.168(d)(3) as referenced by 40 CFR 63.502(a))

4) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters. (40 CFR 63.168(d)(4) as referenced by 40 CFR 63.502(a))

5) Percent leaking valves at a process unit shall be determined by the following equation: (40 CFR 63.168(e)(1) as referenced by 40 CFR 63.502(a))

$$\%VL=(VL/(VT+ VC))\times 100$$

where:

%VL=Percent leaking valves as determined through periodic monitoring required in 40 CFR 63.168(b) through (d).
VL=Number of valves found leaking excluding nonrepairables as provided in 40 CFR 63.168(e)(3)(i).
VT=Total valves monitored, in a monitoring period excluding valves monitored as required by 40 CFR 63.168(f)(3).
VC=Optional credit for removed valves=0.67 × net number (i.e., total removed-total added) of valves in organic HAP service removed from process unit after the date set forth in §63.100(k) of subpart F for existing process units, and after the date of initial start-up for new sources. If credits are not taken, then VC=0.

6) For use in determining monitoring frequency, as specified in 40 CFR 63.168(d), the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs. Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with 40 CFR 63.168(e)(3)(ii). Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods. 40 CFR 63.168(e)(3)(ii) provides that if the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking

valves. (40 CFR 63.168(e)(2) and (e)(3), including all subparagraphs, as referenced by 40 CFR 63.502(a))

7) When a leak is detected, the owner or operator shall repair the leak as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. The monitoring shall be conducted as specified in 40 CFR 63.180(b) and (c), as appropriate, to determine whether the valve has resumed leaking. In addition, any valve repaired on-line shall be monitored for two successive months after repair, using the method specified in 40 CFR 63.180(b), to satisfy the requirement of Additional Condition 1.c.x. and 40 CFR 63.175(e)(7)(i)(D). Periodic monitoring required by 40 CFR 63.168(b) through (d) may be used to satisfy the requirement to monitor the repaired valve at least once within the first 3 months after its repair, if the timing of the monitoring period coincides with this timing. Alternatively, other monitoring may be performed to satisfy this monitoring requirement, regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified for this monitoring requirement. If a leak is detected during such monitoring, the owner or operator shall follow the provisions of 40 CFR 63.168(f)(3)(iii)(A) and (f)(3)(iii)(B) to determine whether that valve must be counted as a leaking valve for purposes of 40 CFR 63.168(e). 40 CFR 63.168(f)(3)(iii)(A) provides that if the owner or operator elected to use the periodic monitoring required by 40 CFR 63.168(b) through (d) to satisfy the monitoring requirement, then the valve with a leak detected during the monitoring shall be counted as a leaking valve for the purpose of calculating the percent leaking valves using the equations set forth in 40 CFR 63.168(e). 40 CFR 63.168(f)(3)(iii)(B) provides that if the owner or operator elected to use other monitoring, prior to the periodic monitoring required by 40 CFR 63.168(b) through (d), to satisfy the monitoring requirement, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking. First attempts at repair include, but are not limited to, the following practices where practicable: (1) Tightening of bonnet bolts; (2) Replacement of bonnet bolts; (3) Tightening of packing gland nuts; and (4) Injection of lubricant into lubricated packing. (40 CFR 63.162(f)(2), which cross-references 40 CFR 63.175(e)(7)(i)(D), and 40 CFR 63.168(f) and (g); as referenced by 40 CFR 63.502(a))

8) Any valve that is designated as an unsafe-to-monitor valve, as described in 40 CFR 63.181(b)(7)(i), is exempt from the requirements of 40 CFR 63.168(b) through (f) if the owner or operator of the valve

determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d), and the owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Any valve that is designated as a difficult-to-monitor valve, as described in 40 CFR 63.181(b)(7)(ii), is exempt from the requirements of 40 CFR 63.168(b) through (d) if the owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner; the process unit within which the valve is located is an existing source or the owner or operator designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and the owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. (40 CFR 63.168(h) and (i), as referenced by 40 CFR 63.502(a))

v. Each agitator in gas/vapor service and/or in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 63.180(b), except as provided in 40 CFR 63.162(b). (40 CFR 63.173(a)(1) as referenced by 40 CFR 63.502(a))

vi. Each agitator in gas/vapor service and/or in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. Indications of liquids dripping, as defined in 40 CFR 63 Subpart H, from bleed ports in pumps and agitator seals in light liquid service, shall not be considered a leak. A "bleed port" is a technologically-required feature of the pump or seal whereby polymer fluid used to provide lubrication and/or cooling of the pump or agitator shaft exits the pump, thereby resulting in a visible dripping of fluid. (40 CFR 63.173(b) as referenced by 40 CFR 63.502(a) and 63.502(d)(1))

1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. (40 CFR 63.173(c)(1) as referenced by 40 CFR 63.502(a))

2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.173(c)(2) as referenced by 40 CFR 63.502(a))

vii. For connectors in gas/vapor service and/or light liquid service, the owner or operator shall perform all monitoring of connectors at the frequencies

specified in the following, except as provided in 40 CFR 63.174(c)(2): (40 CFR 63.174(b)(3) as referenced by 40 CFR 63.502(a))

1) Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period. (40 CFR 63.174(b)(3)(i) as referenced by 40 CFR 63.502(a))

2) Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. An owner or operator may comply with this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period. (40 CFR 63.174(b)(3)(ii) as referenced by 40 CFR 63.502(a))

3) If the owner or operator of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the owner or operator may monitor the connectors one time every 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years. (40 CFR 63.174(b)(3)(iii) as referenced by 40 CFR 63.502(a))

4) If a process unit complying with the requirements of 40 CFR 63.174(b) using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the owner or operator shall increase the monitoring frequency to one time every 2 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The owner or operator may again elect to use the provisions of 40 CFR 63.174(b)(3)(iii) when the percent leaking connectors decreases to less than 0.5 percent. (40 CFR 63.174(b)(3)(iv) as referenced by 40 CFR 63.502(a))

5) If a process unit complying with requirements of 40 CFR 63.174(b)(3)(iii) using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the owner or operator shall increase the monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of 40 CFR 63.174(b)(3)(iii) when the percent leaking connectors decreases to less than 0.5 percent. (40 CFR 63.174(b)(3)(v) as referenced by 40 CFR 63.502(a))

6) The owner or operator may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the owner or operator may not count nonrepairable connectors for the purpose of calculation of the percent leaking connectors in organic hazardous air pollutant service when using the equation specified in 40 CFR 63.174(i)(2) for the second and subsequent monitoring periods. If the owner or operator selects this option, the owner or operator shall calculate the percent leaking connectors for the second and subsequent monitoring periods by setting the nonrepairable component $C_{AN}$ in the equation in 40 CFR 63.174(i)(2) to zero for all monitoring periods. In the alternative, the owner or operator may choose to monitor each connector, that has been opened or has otherwise had the seal broken, for leaks when it is reconnected or within the first three months after being returned to organic hazardous air pollutant service. If, under this alternative, the monitoring detects a leak, it shall be repaired according to the provisions of 40 CFR 63.174(d), unless it is determined to be nonrepairable, in which case it shall be counted as a nonrepairable connector for the purpose of calculating the percent leaking connectors using the equation in 40 CFR 63.174(i)(2) for the second and all subsequent monitoring periods. The owner or operator may switch between the two alternatives set forth in this Additional Condition at the end of the current monitoring period, provided that the switch is reported in the next Periodic Report for Equipment Leaks, as required by 40 CFR 63.182(d) as referenced by 40 CFR 63.506(e)(6), and begin the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch. (40 CFR 63.174(c)(1)(i) through (iii), as referenced by 40 CFR 63.502(a))

7) When a leaking connector is detected, the owner or operator shall repair the leak as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.174(g) and in 40 CFR 63.171. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (40 CFR 63.174(d) as referenced by 40 CFR 63.502(a))

8) Any connector that is designated as an unsafe-to-monitor connector, as described in 40 CFR 63.181(b)(7)(i), is exempt from the connector monitoring requirements of 40 CFR 63.174(a), if the owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (e), and the owner or operator has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic monitoring schedule otherwise

applicable. (40 CFR 63.174(f), (f)(1) and (f)(2), as referenced by 40 CFR 63.502(a))

9) Any connector that is designated as an unsafe-to-repair connector, as described in 40 CFR 63.181(b)(7)(iii), is exempt from the requirements of 40 CFR 63.174(a), (d) and (e) if the owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d), and the connector will be repaired before the end of the next scheduled process unit shutdown. (40 CFR 63.174(g), (g)(1) and (g)(2) as referenced by 40 CFR 63.502(a))

10) Any connector that is inaccessible or is ceramic or ceramic-lined (for example, porcelain, glass, or glass-lined), is exempt from the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. An inaccessible connector is one that is buried; insulated in a manner that prevents access to the connector by a monitor probe; obstructed by equipment or piping that prevents access to the connector by a monitor probe; unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground; unable to be reached without elevating the monitoring personnel more than 2 meters above a permanent support surface or requiring the erection of scaffolding; or unable to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171and 40 CFR 63.174(g). (40 CFR 63.174(h) as referenced by 40 CFR 63.502(a))

viii. For pressure relief devices in gas/vapor service,

1) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 63.172 is exempt from the requirements of 40 CFR 63.165(a) and (b). (40 CFR 63.165(c) as referenced by 40 CFR 63.502(a))

2) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR 63.165(a) and (b), provided the owner or operator, after each pressure release, installs a rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. (40 CFR 63.165(d)(1) and (2) as referenced by 40 CFR 63.502(a))

ix. Pressure relief devices in light liquid service and instrumentation systems shall be monitored within 5 calendar days by the method specified in 40 CFR 63.180(b) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in 40 CFR 63.169(c) and (d), it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b). (40 CFR 63.169(a) as referenced by 40 CFR 63.502(a))

1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. (40 CFR 63.169(c)(1) as referenced by 40 CFR 63.502(a))

2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.169(c)(2) as referenced by 40 CFR 63.502(a))

3) For equipment identified in 40 CFR 63.169(a) that is not monitored by the method specified in 40 CFR 63.180(b), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. (40 CFR 63.169(c)(3) as referenced by 40 CFR 63.502(a))

x. When the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) are being used to comply with the LDAR requirements of 40 CFR Part 63 Subpart U, which references 40 CFR Part 63 Subpart H, the following monitoring requirements apply to these MACT LDAR control devices. The Flare Control System shall comply with the requirements of 40 CFR 63.11(b) of subpart A. (40 CFR 63.172(d) as referenced by 40 CFR 63.502(a))(See Comment 14)

1) Owners or operators of control devices that are used to comply with the provisions of 40 CFR 63 Subpart H shall monitor these control devices to ensure that they are operated and maintained in conformance with their design. (40 CFR 63.172(e) as referenced by 40 CFR 63.502(a))

2) Inspections – Except as provided in §63.172(k) and §63.172(l) for any parts of the closed-vent system that are designated as unsafe-to-inspect or difficult-to-inspect, each closed-vent system shall be inspected according to the procedures and schedule specified in §§63.172(f)(1) and (f)(2). (40 CFR 63.172(f) as referenced by 40 CFR 63.502(a)) (See Comment 14)

a) If the closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures in §63.172(g) and conduct annual visual inspections for visible, audible, or olfactory indications of leaks. (40 CFR 63.172(f)(1) as referenced by 40 CFR 63.502(a))

b) Each closed-vent system shall be inspected according to the procedures in §63.180(b). (40 CFR 63.172(g) as referenced by 40 CFR 63.502(a))

3) Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in §63.172(i). (40 CFR 63.172(h) as referenced by 40 CFR 63.502(a))

a) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (40 CFR 63.172(h)(1) as referenced by 40 CFR 63.502(a))

b) Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in §63.172(i). (40 CFR 63.172(h)(2) as referenced by 40 CFR 63.502(a))

4) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. (40 CFR 63.172(i) as referenced by 40 CFR 63.502(a))

d. **VOC**

i. For Storage Vessels (T-2, T-2A, T-2B, T-2C, T-3, T-4, T-4A, T-4B, T-4C, and T-1), see Additional Condition 3.d.i.

ii. For Storage Vessels (T-15M, T-15T, T-32, Day Tank 2, Day Tank 3, Day Tank 4, Day Tank 5, Day Tank 6, T-11M, T-12M, T-13M, T-13T, T-14, and D-3), see Additional Condition 3.d.ii.

iii. For Emission Points (Truck Staining Oil Loading/Unloading (when loading), Railcar Staining Oil Loading/Unloading (when loading), Railcar Loading and Railcar Solvent Loading),

1) When loading more than 200 gallons but less than 20,000 gallons of volatile organic material (VOM) in any one day, there are no VOC compliance monitoring requirements for these Emission Points because all of the Emission Points are submerged fill/bottom loaded.

2) When loading 20,000 gallons or more of volatile organic materials (VOM) in any one day,

a) For Emission Points (Truck Staining Oil Loading/Unloading (when loading), Railcar Staining Oil Loading/Unloading (when loading), Railcar Loading (when being operated as a closed system) and Railcar Solvent Loading (when being operated as a closed system)), each of which is a closed system, there are no VOC compliance monitoring requirements because these Emission Points do not have a vent to the atmosphere.

b) For Emission Point (Railcar Loading), when not being operated as a closed system and is being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE), see Additional Condition 3.d.iii.2)b).

c) For Emission Point (Railcar Solvent Loading), when not being operated as a closed system, see Additional Condition 3.d.iii.2)c).

iv. For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, D-32, D-15, C-7, D-9, D-13, C-1, D-10, D-17, D-18, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, Reactor 1 through Reactor 13, D-24, D-25, D-26, D-27, D-28, D-29, D-24, T-5A, T-5B, T-5C, T-5D, T-5E, No. 1 Stripper Vessels, and No. 2 Stripper Vessels),

1) For Emission Points (D-32, D-15, D-18, D-7, D-28, D-29, T-5A, T-5B, T-5C, T-5D, and T-5E), see Additional Condition 3.d.iv.1)

2) For Emission Points (D-13, D-1, D-39, D-5, D-38A, D-38B, D-6, and D-8), all of which are subject to Regulation 6.24 and are not vented to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE), the owner or operator submitted a one-time VOC compliance demonstration on July 25, 2003, which

showed that the uncontrolled maximum VOC emissions at each emission point do not exceed the regulatory requirements of Regulation 6.24. Therefore there are no VOC monitoring, recordkeeping, or reporting requirements for these emission points. For the puposes of the compliance demonstrations, all Class II and Class III VOC mixtures were assumed to be Class II, which are the more stringent regulatory limits.

3) For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, C-7, D-9, C-1, D-10, D-17, Reactor 1 through Reactor 13, D-24, D-25, D-26, D-27, No. 1 Stripper Vessels, and No. 2 Stripper Vessels), there are no VOC monitoring requirements since these emission points are closed or closed pressurized systems that do not have a vent to the atmosphere.

v. For Emission Points (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line),

1) The owner or operator shall calculate, on an average monthly basis, the overall control efficiency (capture and control) of the VOCs from the Finishing Building processes, using the District approved capture efficiency of 90%.

2) The owner or operator shall monitor the indicator of proper operation for each control device. For the coal fired boilers, the indicator of proper operation is hourly coal usage, and for the Regenerative Thermal Oxidizer (RTO-1), the indicator of proper operation is the minimum daily average combustion temperature of 1413°F. (See Comment 19)

vi. For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, D-16M, C-2, D-16, X-2T, C-2T, D-16T, D-59M, C-1A, D-10A, C-1T, D-10T, D-17T, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-28M, D-25T, D-26T, D-28T, D-64M, T-5F, T-5G, T-5H, T-5J, T-5K, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, D-30, D-30M, D-30T, T-9A, T-9B, T-9C, T-9D, T-9E/T, No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, No. 5 Line, and Heat Cleaning Oven),

1) For Emission Points (D-16M, D-16, D-16T, D-59M, D-10T (when not operating as a closed system and venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-18T, C-9M, D-7M, D-5M, D-56M, D-57M, D-8M,

D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28T, D-64M, T-5F, T-5G, T-5H, T-5J, and T-5K), see Additional Condition 3.d.vi.1)

2) For Emission Points (D-30, D-30M, D-30T, No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), see Additional Condition 3.d.vi.2)

3) For Emission Points (D-44, D-44M, and D-45M), the potential uncontrolled combined VOC emissions are less than 1 ton per year. Therefore there are no monitoring requirements to meet the less than 1 ton per year standard. Since all VOCs are HAPs subject to 40 CFR 63 Subpart U, VOC emissions also meet the VOC BACT by complying with the MACT.

4) For Emission Point (Heat Cleaning Oven),

a) The uncontrolled potential VOC emissions are less than 1 ton per year, therefore there are no monitoring requirements to meet the standard.

b) When the emission point is in operation, the owner or operator shall monitor and calculate the average batch cycle oxidizing or afterburner chamber temperature for each batch cycle. The minimum average batch cycle oxidizing or afterburner chamber temperature shall be 1450°F. (Construction Permit 246-01-C, dated September 30, 2002)

5) For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, C-2, X-2T, C-2T, C-1A, D-10A, C-1T, D-10T (when operating as a closed system and not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-17T, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-25T, D-26T, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D, and T-9E/T), there are no monitoring requirements since these emission points are closed or closed pressurized systems that do not have a vent to the atmosphere.

vii. For Emission Points (No. 1 Line, No. 4 Line, and No. 5 Line), see Additional Condition 3.d.vii. (See Comment 17)

viii. The owner or operator shall calculate emissions from production lines by using the following formulas: (Regulation 1.05, section 4)

U1/U2 VOC Daily Emissions = Front-End VOC Emissions + Production VOC Emissions + Back-End VOC Emissions + Fugitive/Other VOC Emissions

Where:

Front-End VOC Emissions = (Average Inlet to Control Device) x (1 - Control Efficiency)

Production VOC Emissions = ((Production x Adjusted Residual VOC) - (Production x Average Bale Residual VOC)) x (1 - Capture Efficiency (90%))

Back-End VOC Emissions = ((Production x Adjusted Residual VOC) - (Production x Average Bale Residual VOC)) x (Capture Efficiency (90%)) x (1 - Control Efficiency)

Fugitive/Other VOC Emissions = Average Solvent Consumption - (Solvent to Inlet to Front-End Control Device + Production Solvent Emissions + Solvent to Inlet to Back-End Control Device + Solvent Remaining in Product + Solvent in Waste Rubber)

ix. For Emission Points (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), see Additional Condition 3.d.ix.

e. **PM**

i. For Emission Point (BU-1T), the owner or operator shall perform the following for the associated fabric filter (C-U1/U2-DC-1T)

1) Perform a monthly visual inspection of the structural and mechanical integrity (i.e. for signs of damage, air leakage, corrosion, etc.) on the external part of the unit and repair as needed.

2) Perform a monthly visual inspection of the filter media for deterioration and replace or repair as needed.

ii. For Emission Point (Heat Cleaning Oven), the owner or operator submitted a one time PM compliance demonstration on July 25, 2003 showing that the potential uncontrolled PM hourly emissions are less than the standard in Regulation 7.08. Therefore, there are no monitoring, recordkeeping, or reporting requirements for this standard. (Construction Permit 246-01-C, dated September 30, 2002)

f. **Opacity**

For Emission Points (BU-1T and Heat Cleaning Oven),

i. The owner or operator shall conduct a daily one-minute visible emissions survey, during normal operation and daylight hours, of the emission points/stacks. No more than four emission points/stacks shall be observed

simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.

ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.

g. **TAP**

i. For Emission Point (Railcar Loading) (when not operated as a Closed System and being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or the existing Flare Control System (C-FLARE)): See Additional Condition 3.g.i.

ii. For Emission Point (Railcar Solvent Loading and Heat Cleaning Oven), see Additional Condition 3.g.ii.

iii. For all Emission Points subject to Regulation 5.11 or 5.12 that emit the THF (tetrahydrofuran) TAP, the owner or operator submitted a THF TAP One-Time Compliance Demonstration on July 1, 2004, as part of the Flare Thermal Oxidizer Construction Permit Application, that showed the potential, uncontrolled, TAP emissions (without consideration of the Flare Thermal Oxidizer (C-FLARE TO)) cannot exceed the ASL. The owner or operator also had, on July 25, 2003, submitted a THF TAP One-Time Compliance Demonstration that showed the potential, uncontrolled, TAP emissions (without consideration of the Flare Control System (C-FLARE)) cannot exceed the ASL. Therefore, the potential, uncontrolled, TAP emissions (without consideration of C-FLARE TO and/or C-FLARE)) cannot exceed the ASL. There are thus no TAP compliance monitoring requirements for these Emission Points. (See Comment 20)

iv. For all other TAPs emitted from Emission Points where the TAP is not subject to a MACT, see Additional Condition 3.g.iii.

v. For all Emission Points subject to Regulation 5.11 or 5.12 that are closed systems, there are no TAP compliance monitoring requirements for these Emission Points.

h. **Fuel**

i. For the Flare Thermal Oxidizer (C-FLARE-TO), see Additional Condition 3.h.i.

ii. For the Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1), see Additional Condition 3.h.ii.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **1,3-Butadiene**

i. When the Flare Thermal Oxidizer (C-FLARE-TO) is operating and processing any process vent stream, the owner or operator shall maintain continuous combustion temperature records of the Flare Thermal Oxidizer as specified in Additional Condition 3.b.iii.1)a) (Construction Permit 112-04-C, dated August 31, 2004)

ii. The owner or operator shall maintain a record of the date, start time, and stop time for each diversion of the process vent stream to the Flare Control System (C-FLARE) from the Flare Thermal Oxidizer (C-FLARE TO) that occurred during each month. If there are no diversions during the month the owner or operator shall record that there were no diversions in the month. (Construction Permit 112-04-C, dated August 31, 2004) (See Comment 13)

iii. When the Flare Thermal Oxidizer (C-FLARE-TO) is operating and processing any process vent stream, the owner or operator shall keep a continuous record of the gas flow (process vent stream plus the combustion air) with the exception of any monitor downtime. (Construction Permit 112-04-C, dated August 31, 2004) (See Comment 2)

iv. The owner or operator shall keep a monthly record of the hours that any or all of the process vent stream flow is diverted from the Flare Thermal Oxidizer (C-FLARE-TO) to the Flare Control System (C-FLARE). The owner or operator shall monthly calculate the 12 consecutive month hours of diversion. (Construction Permit 112-04-C, dated August 31, 2004)

v. The owner or operator shall maintain records regarding the status of spare parts recommended by the manufacturer of the Flare Thermal Oxidizer (C-FLARE TO).(Construction Permit 112-04-C, dated August 31, 2004)

vi. The owner or operator shall monthly calculate the total plantwide emissions of 1,3-Butadiene.

b. **HAP (Non-LDAR)**

i. For Group 2 storage vessels (T-3 and T-1), the owner or operator shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 2 status and is in operation. (40 CFR 63.123(a) as referenced by 40 CFR 63.484(a))

ii. For Emission Points (T-2, Day Tank 4, Day Tank 5, and Day Tank 6, when each is not being used as a Surge Control Vessel and is being used to store styrene), these tanks are exempt from the 40 CFR 63 Subpart U provisions

of 40 CFR 63.484 per 40 CFR 63.484(b)(5). Therefore, there are no HAP Non-LDAR compliance recordkeeping requirements for these Emission Points. (40 CFR 63.484(b)(5))

iii. For Group 1 Continuous Front-End Process Vents (D-16M, D-16, D-16T, and D-10T (when venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) and not being operated as a closed system), the owner or operator shall keep the following records up-to-date and readily accessible: (40 CFR 63.118(a) as referenced by 40 CFR 63.485(a))

1) For the Flare Thermal Oxidizer,

a) Continuous records of the combustion temperature. (40 CFR 63.118(a)(1) and 63.114(a)(1), as referenced by 40 CFR 63.485(a)) (See Comment 12)

b) Records of the daily average value of each continuously monitored parameter (combustion temperature) for each operating day determined according to the procedures specified in 40 CFR 63.152(f). (40 CFR 63.118(a)(2) as referenced by 40 CFR 63.485(a))

2) For the Flare Control System,

a) Hourly records of whether the monitor was continuously operating and whether the pilot flame was continuously present during each hour. (40 CFR 63.118(a)(1) and Table 3 to 40 CFR 63 Subpart G as referenced by 40 CFR 63.485(a))

b) Records of the times and duration of all periods during which all pilot flames are absent or the monitor is not operating. (40 CFR 63.118(a)(2) and Table 3 to 40 CFR 63 Subpart G as referenced by 40 CFR 63.485(a))

iv. For Group 2 Continuous Front End Process Vents with TRE greater than 1.0 but less than or equal to 4.0 (T-5A, T-5B, T-5C, T-5D, T-5E, T-5F, T-5G, T-5H, T-5J, and T-5K), the owner or operator shall comply with the Group 1 Continuous Front End Process Vent requirements contained in Additional Condition 3.b.iii.

v. For Group 2 Continuous Front-End Process Vents having a TRE value greater than 4.0 (D-59M, D-32, D-15, D-13, D-18, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28, D-28T, D-64M, D-29, D-30,

D-30M, and D-30T), the owner or operator shall maintain records of the following.

1) Records shall be maintained of engineering assessments and calculations performed pursuant to 40 CFR 63.115(d)(1) and (d)(1)(i) to determine the TRE index value of the vent streams. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). (40 CFR 63.117(b))

2) The owner or operator of a Group 2 process vent shall recalculate (and maintain records of same) the TRE index value, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph, process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE calculation was based. (40 CFR 63.115(e))

a) The TRE index value shall be recalculated based on best engineering assessment of the effects of the change. Engineering assessments shall meet the specification in 40 CFR 63.115(d)(1). (40 CFR 63.115(e)(1)

b) Where the recalculated TRE index value is less than or equal to 1.0, or less than or equal to 4.0 but greater than 1.0, the owner or operator shall submit a report as specified in 40 CFR 63.485(l). (40 CFR 53.115(e)(2) and 40 CFR 63.485(l)) (See Additional Condition 4.b.iv.)

3) Up-to-date, readily accessible records shall be maintained of any process changes as defined in 40 CFR 63.115(e). (40 CFR 63.118(c)(1))

4) Up-to-date, readily accessible records shall be maintained of any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). (40 CFR 63.118(c)(2))

vi. For Surge Control Vessels (T-2 (when used as a surge control vessel), T-2A, T-2B, T-2C, T-4, T-4A, T-4B, T-4C, T-15M, T-15T, T-32, Day Tank 2, Day Tank 3, Day Tank 4 (when used as a surge control vessel), Day Tank 5 (when used as a surge control vessel), and Day Tank 6 (when used as a surge

control vessel)), there are no HAP Non-LDAR compliance recordkeeping requirements. (See Comment 11)

vii. For Closed System or Closed Pressurized System Emission Points (X-2M, C-2M, X-2, C-2, X-2T, C-2T, C-7, D-9, C-1, D-10, C-1A, D-10A, C-1T, D-10T (when operated as a closed system and not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-17, D-17T, Reactor 1 through Reactor 13, Reactor 14, D-24, D-24M, D-24T, D-25M, D-26M, D-25, D-26, D-27, D-25T, D-26T, No. 1 Stripper Vessels, No. 2 Stripper Vessels, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D, and T-9E/T), there are no HAP Non-LDAR compliance recordkeeping requirements.

viii. When the Flare Thermal Oxidizer (C-FLARE TO) is being used to comply with the HAP Non-LDAR requirements, the owner or operator shall keep continuous temperature records as specified below. (40 CFR 63.506(d))

1) The temperature monitoring system shall measure data values at least once every 15 minutes. (40 CFR 63.506(d)(1))

2) The owner or operator shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values. (40 CFR 63.506(d)(2))

3) Daily average values of each continuously monitored parameter shall be calculated for each operating day as specified in §§63.506(d)(3)(i) through (d)(3)(ii), except as specified in paragraphs §§63.506(d)(6) and (d)(7). (40 CFR 63.506(d)(3))

a) The daily average value shall be calculated as the average of all parameter values recorded during the operating day, except as specified in §63.506(d)(7). The calculated average shall cover a 24-hour period if operation is continuous. (40 CFR 63.506(d)(3)(i))

b) The operating day shall be the period that the owner or operator specifies in the operating permit or the Notification of Compliance Status for purposes of determining daily average values or batch cycle daily average values of monitored parameters. American Synthetic Rubber Company's operating day for the Flare Thermal Oxidizer is defined as midnight to midnight. (40 CFR 63.506(d)(3)(ii))

4) If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average for that operating day. (40 CFR 63.506(d)(6))

5) Monitoring data recorded during periods identified in 40 CFR 63.506(d)(7)(i) through (d)(7)(v) shall not be included in any average computed under 40 CFR 63 Subpart U. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating. (40 CFR 63.506(d)(7))

a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; (40 CFR 63.506(d)(7)(i))

b) Start-ups; (40 CFR 63.506(d)(7)(ii))

c) Shutdowns; (40 CFR 63.506(d)(7)(iii))

d) Malfunctions; or (40 CFR 63.506(d)(7)(iv))

e) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies. (40 CFR 63.506(d)(7)(v))

6) For continuous monitoring systems used to comply with 40 CFR 63 Subpart U, records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. (40 CFR 63.506(d)(8))

ix. When the Flare Control System (C-FLARE) is being used to comply with the HAP Non-LDAR requirements, the owner or operator shall maintain the following records.

1) The owner or operator shall monthly calculate and record the net heating value of the gas being combusted in order to demonstrate compliance with Additional Condition 2.b.ix.1).

2) The owner or operator shall monthly calculate and record the exit velocity in order to demonstrate compliance with Additional Condition 2.b.ix.2).

3) The owner or operator shall keep a record of each visible emission test (Method 22) performed pursuant to Additional Condition 2.b.ix.3).

4) The owner or operator shall obtain a sample of the gas going to the Flare Control System within 24 hours and the flow of gas going to the Flare Control System if the flame is extinguished for any reason and there are U1/U2 process gases being vented to the Flare Control System.

x. For Back-End Process Operations (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), the owner or operator shall maintain the following records:

1) Records associated with each sample taken in accordance with Additional Condition 2.b.x. These records shall include the following for each sample: (40 CFR 63.498(b)(1))

a) Elastomer type, (40 CFR 63.498(b)(1)(i))

b) The date and time the sample was collected, (40 CFR 63.498(b)(1)(ii))

c) The corresponding quantity of elastomer processed over the time period represented by the sample. Acceptable methods of determining this quantity are production records, measurement of stream characteristics, and engineering calculations. (40 CFR 63.498(b)(1)(iii)) For solution processes, this quantity shall be the crumb rubber dry weight of the rubber leaving the stripper. (40 CFR 63.498(b)(1)(iii)(B))

d) The organic HAP content of each sample. (40 CFR 63.498(b)(1)(iv))

2) The monthly weighted average organic HAP content, calculated in accordance with Additional Condition 2.b.x.2)e). (40 CFR 63.498(b)(2))

3) If the organic HAP contents for all samples analyzed during a month are below the appropriate level in Additional Condition 1.b.x., the owner or operator may record that all samples were in accordance with the residual organic HAP limitations in Additional Condition

1.b.x., rather than calculating and recording a monthly weighted average. (40 CFR 63.498(b)(3))

4) If stripping technology alone does not result in meeting the residual organic HAP limitation in Additional Condition 1.b.x., and the combination of stripping technology and the Regenerative Thermal Oxidizer RTO-1 is used to meet the limitation, the owner or operator shall keep the following records readily accessible:

a) Continuous records of the combustion temperature. (40 CFR 63.498(d)(5)(i))

b) Records of the daily average value of the combustion temperature for each operating day, except as provided in 40 CFR 63.498(d)(5)(ii)(D). (40 CFR 63.498(d)(5)(ii))

(A) The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day, except as provided in 40 CFR 63.498(d)(5)(ii)(B). The average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per operating day if operation is not continuous. (40 CFR 63.498(d)(5)(ii)(A))

(B) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in computing the hourly or daily averages. In addition, monitoring data recorded during periods of non-operation of the EPPU (or specific portion thereof) resulting in cessation of organic HAP emissions or during periods of start-up, shutdown, or malfunction shall not be included in computing the hourly or daily averages. Records shall be kept of the times and durations of all such periods and any other periods of process or control device operation when monitors are not operating. (40 CFR 63.498(d)(5)(ii)(B))

(C) The operating day shall be the period defined in the operating permit or the Notification of Compliance Status in §63.506(e)(8) or (e)(5). It may be from midnight to midnight or another 24-hour period. American Synthetic Rubber Company's operating day for the U1/U2 HAP Non-LDAR Back-End Process is

defined as 6AM to 6AM.(40 CFR 63.498(d)(5)(ii)(C)) (See Comment 24)

(D) If all recorded values for a monitored parameter during an operating day are below the maximum, or above the minimum, level established in the Notification of Compliance Status in 40 CFR 63.506(e)(5) or in the operating permit, the owner or operator may record that all values were below the maximum or above the minimum level, rather than calculating and recording a daily average for that operating day. (40 CFR 63.498(d)(5)(ii)(D))

c) Hourly records of whether the flow indicator specified under §63.497(d)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device or the flow indicator is not operating. (40 CFR 63.498(d)(5)(iii))

d) Where a seal mechanism is used to comply with §63.497(d)(2), hourly records of flow are not required. (40 CFR 63.498(d)(5)(iv))

For compliance with §63.497(d)(2), the owner or operator shall record whether the monthly visual inspection of the seals or closure mechanisms has been done, and shall record instances when the seal mechanism is broken, the bypass line damper or valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has broken. (40 CFR 63.498(d)(5)(iv)(A))

xi. For heat exchange systems, the owner or operator shall retain the records identified in Additional Condition 3.b.xi.1) through 4) as specified in 40 CFR 63.103(c)(1). (40 CFR 63.104(f)(1) as referenced by 40 CFR 63.502(n))

1) Monitoring data required by Additional Conditions 2.b.xi., 2.b.xii., and 2.b.xiii. indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination; (40 CFR 63.104(f)(1)(i) as referenced by 40 CFR 63.502(n))

2) Records of any leaks detected by procedures subject to 40 CFR 63.104(c)(2) and the date the leak was discovered; (40 CFR 63.104(f)(1)(ii) as referenced by 40 CFR 63.502(n))

3) The dates of efforts to repair leaks; and (40 CFR 63.104(f)(1)(iii) as referenced by 40 CFR 63.502(n))

4) The method or procedure used to confirm repair of a leak and the date repair was confirmed. (40 CFR 63.104(f)(1)(iv) as referenced by 40 CFR 63.502(n))

xii. For 40 CFR 63 Subpart U maintenance wastewaters, (40 CFR 63.105 as referenced by 40 CFR 63.501(b)) (See Comment 9)

1) The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall: (40 CFR 63.105(b) as referenced by 40 CFR 63.501(b))

a) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities. (40 CFR 63.105(b)(1) as referenced by 40 CFR 63.501(b))

b) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and (40 CFR 63.105(b)(2) as referenced by 40 CFR 63.501(b))

c) Specify the procedures to be followed when clearing materials from process equipment. (40 CFR 63.105(b)(3) as referenced by 40 CFR 63.501(b))

2) The owner or operator shall modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. (40 CFR 63.105(c) as referenced by 40 CFR 63.501(b))

3) The owner or operator shall implement the procedures described in 40 CFR 63.105(b) and (c) as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). (40 CFR 63.105(d))

4) The owner or operator shall maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3).

xiii. The owner or operator of an affected source shall develop and implement a written start-up, shutdown, and malfunction plan as specified in 40 CFR 63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with this subpart. Inclusion of Group 2 emission points is not required, unless these points are included in an emissions average. For equipment leaks (subject to 40 CFR 63.502), the start-up, shutdown, and malfunction plan requirement is limited to control devices and is optional for other equipment. For equipment leaks, the start-up, shutdown, and malfunction plan may include written procedures that identify conditions that justify a delay of repair. A provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this subpart may be included in the start-up, shutdown, and malfunction plan only if the owner or operator has demonstrated to the Administrator, through the Precompliance Report or a supplement to the Precompliance Report, that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. The affected source shall keep the start-up, shutdown, and malfunction plan on-site. Records associated with the plan shall be kept as specified in 40 CFR 63.506(b)(1)(i)(A) through (b)(1)(i)(C). Reports related to the plan shall be submitted as specified in 40 CFR 63.506(b)(1)(ii). (40 CFR 63.506(b))

1) Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or control devices or recovery devices or continuous monitoring systems used to comply with this subpart during which excess emissions (as defined in 40 CFR 63.480(j)(4)) occur. (40 CFR 63.506(b)(1)(i)(A))

2) For each start-up, shutdown, or malfunction during which excess emissions (as defined in 40 CFR 63.480(j)(4)) occur, records reflecting whether the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a control device to a backup control device, records shall be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of recordkeeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event. (40 CFR 63.506(b)(1)(i)(B))

3) Records are not required if they pertain solely to Group 2 emission points that are not included in an emissions average. (40 CFR 63.506(b)(1)(i)(C))

xiv. The owner or operator shall monthly calculate the total plant-wide emissions of each HAP starting in January 2004. (Construction Permit 321-03-C, dated September 30, 2003; Construction Permit 112-04-C, dated August 31, 2004; and Construction Permit 116-04-C, dated July 31, 2004)

c. **HAP (LDAR)**

i. A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in 40 CFR 63.174 and instrumentation systems) subject to the requirements of 40 CFR 63 Subpart H. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. (40 CFR 63.181(b)(1)(i) as referenced by 40 CFR 63.502(a))

ii. A schedule by process unit for monitoring connectors subject to the provisions of §63.174(a) of 40 CFR 63 Subpart H and valves subject to the provisions of §63.168(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(1)(ii) as referenced by 40 CFR 63.502(a))

iii. Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of 40 CFR 63 Subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods. (40 CFR 63.181(b)(1)(iii) as referenced by 40 CFR 63.502(a))

iv. A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.163(g), §63.164(h), §63.165(c), or §63.173(f) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(2)(i) as referenced by 40 CFR 63.502(a))

v. A list of identification numbers for compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i). (40 CFR 63.181(b)(2)(ii) as referenced by 40 CFR 63.502(a))

vi. A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.165(a). (40 CFR 63.181(b)(3)(i) as referenced by 40 CFR 63.502(a))

vii. A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). (40 CFR 63.181(b)(3)(ii) as referenced by 40 CFR 63.502(a))

viii. Identification of instrumentation systems subject to the provisions of 40 CFR 63 Subpart H. Individual components in an instrumentation system need not be identified. (40 CFR 63.181(b)(4) as referenced by 40 CFR 63.502(a))

ix. Identification of screwed connectors subject to the requirements of §63.174(c)(2) of 40 CFR 63 Subpart H. Identification can be by area or grouping as long as the total number within each group or area is recorded. (40 CFR 63.181(b)(5) as referenced by 40 CFR 63.502(a))

x. The following information pertaining to all pumps subject to the provisions of 40 CFR 63.163(j), valves subject to the provisions of 40 CFR 63.168(h) and (i), agitators subject to the provisions of 40 CFR 63.173(h) through (j), and connectors subject to the provisions of 40 CFR 63.174(f) and (g) shall be recorded: (40 CFR 63.181(b)(7) as referenced by 40 CFR 63.502(a))(See Comment 15)

1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment. (40 CFR 63.181(b)(7)(i) as referenced by 40 CFR 63.502(a))

2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment. (40 CFR 63.181(b)(7)(ii) as referenced by 40 CFR 63.502(a))

3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair. (40 CFR 63.181(b)(7)(iii) as referenced by 40 CFR 63.502(a))

xi. A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used. (40 CFR 63.181(b)(8)(i) as referenced by 40 CFR 63.502(a))

xii. A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used. (40 CFR 63.181(b)(8)(ii) as referenced by 40 CFR 63.502(a))

xiii. For any leaks detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of 40 CFR 63 Subpart H, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. (40 CFR 63.181(b)(10) as referenced by 40 CFR 63.502(a))

xiv. For visual inspections of equipment subject to the provisions of 40 CFR 63 Subpart H [e.g., §63.163(b)(3), §63.163(e)(4)(i)], the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in 40 CFR

63.181(d) for leaking equipment identified in this inspection, except as provided in 40 CFR 63.181(e). These records shall be retained for 5 years. (40 CFR 63.181(c) as referenced by 40 CFR 63.502(a) and 63.506(a))

xv. When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of 40 CFR 63 Subpart H, the following information shall be recorded and kept for 5 years: (40 CFR 63.181(d) as referenced by 40 CFR 63.502(a) and 63.506(a))

1) The instrument and the equipment identification number and the operator name, initials, or identification number. (40 CFR 63.181(d)(1) as referenced by 40 CFR 63.502(a))

2) The date the leak was detected and the date of first attempt to repair the leak. (40 CFR 63.181(d)(2) as referenced by 40 CFR 63.502(a))

3) The date of successful repair of the leak. (40 CFR 63.181(d)(3) as referenced by 40 CFR 63.502(a))

4) Maximum instrument reading measured by Method 21 of 40 CFR 60, Appendix A after it is successfully repaired or determined to be nonrepairable. (40 CFR 63.181(d)(4) as referenced by 40 CFR 63.502(a))

5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. (40 CFR 63.181(d)(5) as referenced by 40 CFR 63.502(a))

a) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure. (40 CFR 63.181(d)(5)(i) as referenced by 40 CFR 63.502(a))

b) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion. (40 CFR 63.181(d)(5)(ii) as referenced by 40 CFR 63.502(a))

6) Dates of process unit shutdowns that occur while the equipment is unrepaired. (40 CFR 63.181(d)(6) as referenced by 40 CFR 63.502(a))

7) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the owner or operator elects to comply with the provisions of 40 CFR 63.174(c)(1)(ii). (40 CFR 63.181(d)(7)(i) and (ii) as referenced by 40 CFR 63.502(a))

8) Copies of the periodic reports as specified in 40 CFR 63.506(e)(6), if records are not maintained on a computerized database capable of generating summary reports from the records. (40 CFR 63.181(d)(9) as referenced by 40 CFR 63.502(a) and 40 CFR 63.502(g))

xvi. The dates and results of each compliance test required for compressors subject to the provisions in 40 CFR §63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.165(a) and (b). The results shall include: (40 CFR 63.181(f) as referenced by 40 CFR 63.502(a))

1) The background level measured during each compliance test. (40 CFR 63.181(f)(1) as referenced by 40 CFR 63.502(a))

2) The maximum instrument reading measured at each piece of equipment during each compliance test. (40 CFR 63.181(f)(2) as referenced by 40 CFR 63.502(a))

xvii. For the Flare Thermal Oxidizer (C-FLARE TO) and Flare Control System (C-FLARE), the owner or operator shall maintain records of the information specified in §§63.181(g)(1) through (g)(3) for closed-vent systems and control devices subject to the provisions of 40 CFR 63.172. The records specified in §63.181(g)(1) shall be retained for the life of the equipment. The records specified in §§63.181(g)(2) and (g)(3) shall be retained for 5 years. (40 CFR 63.181(g) as referenced by 40 CFR 63.502(a) and 63.506(a)) (See Comment 14)

1) The design specifications and performance demonstrations specified in §§63.181(g)(1)(i) through (g)(1)(iv). (40 CFR 63.181(g)(1) as referenced by 40 CFR 63.502(a))

a) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams. (40 CFR 63.181(g)(1)(i) as referenced by 40 CFR 63.502(a))

b) The dates and descriptions of any changes in the design specifications. (40 CFR 63.181(g)(1)(ii) as referenced by 40 CFR 63.502(a))

c) For the Flare Control System (C-FLARE), the flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of subpart A. (40 CFR 63.181(g)(1)(iii) as referenced by 40 CFR 63.502(a))

d) A description of the parameter or parameters monitored, as required in §63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for monitoring. (40 CFR 63.181(g)(1)(iv) as referenced by 40 CFR 63.502(a)) *Note, per Table 7 to Subpart U of Part 63, the established operating parameter monitoring level is minimum temperature for C-FLARE TO, and the presence of a pilot flame for C-FLARE.*

2) Records of operation of closed-vent systems and control devices, as specified in §§63.181(g)(2)(i) through (g)(2)(iii). (40 CFR 63.181(g)(2) as referenced by 40 CFR 63.502(a))

a) Dates and duration when the closed-vent systems and control devices required in §§63.163 through 63.166, and §63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame. (40 CFR 63.181(g)(2)(i) as referenced by 40 CFR 63.502(a))

b) Dates and durations during which the monitoring system or monitoring device is inoperative. (40 CFR 63.181(g)(2)(ii) as referenced by 40 CFR 63.502(a))

c) Dates and durations of start-ups and shutdowns of control devices required in §§63.163 through 63.166, and §63.170. (40 CFR 63.181(g)(2)(iii) as referenced by 40 CFR 63.502(a))

3) Records of inspections of closed-vent systems subject to the provisions of §63.172, as specified in §§63.181(g)(3)(i) and (g)(3)(ii). (40 CFR 63.181(g)(3) as referenced by 40 CFR 63.502(a))

a) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. (40 CFR 63.181(g)(3)(i) as referenced by 40 CFR 63.502(a))

b) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in §63.181(d) shall be recorded. (40 CFR 63.181(g)(3)(ii) as referenced by 40 CFR 63.502(a))

xviii. Each owner or operator of a process unit subject to the requirements of §§63.175 and 63.176 of 40 CFR 63 Subpart H shall maintain the records specified in 40 CFR 63.181(h)(1) through (h)(9) for the period of the quality improvement program for the process unit. (40 CFR 63.181(h) as referenced by 40 CFR 63.502(a))

1) For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in §63.175(d) of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(1) as referenced by 40 CFR 63.502(a))

a) All data required in §63.175(d)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(1)(i) as referenced by 40 CFR 63.502(a))

b) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter. (40 CFR 63.181(h)(1)(ii) as referenced by 40 CFR 63.502(a))

c) The beginning and ending dates while meeting the requirements of §63.175(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(1)(iii) as referenced by 40 CFR 63.502(a))

2) For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in §63.175(e) of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(2) as referenced by 40 CFR 63.502(a))

a) All data required in §63.175(e)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(2)(i) as referenced by 40 CFR 63.502(a))

b) The percent leaking valves observed each quarter. (40 CFR 63.181(h)(2)(ii) as referenced by 40 CFR 63.502(a))

c) Documentation of all inspections conducted under the requirements of §63.175(e)(4) of 40 CFR 63 Subpart H, and any recommendations for design or specification changes to reduce leak frequency. (40 CFR 63.181(h)(2)(iii) as referenced by 40 CFR 63.502(a))

d) The beginning and ending dates while meeting the requirements of §63.175(e) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(2)(iv) as referenced by 40 CFR 63.502(a))

3) For owners or operators subject to the requirements of the pump quality improvement program as specified in §63.176 of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(3) as referenced by 40 CFR 63.502(a))

a) All data required in §63.176(d)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(3)(i) as referenced by 40 CFR 63.502(a))

b) The rolling average percent leaking pumps. (40 CFR 63.181(h)(3)(ii) as referenced by 40 CFR 63.502(a))

c) Documentation of all inspections conducted under the requirements of §63.176(d)(4) of 40 CFR 63 Subpart H, and any recommendations for design or specification changes to reduce leak frequency. (40 CFR 63.181(h)(3)(iii) as referenced by 40 CFR 63.502(a))

d) The beginning and ending dates while meeting the requirements of §63.176(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(3)(iv) as referenced by 40 CFR 63.502(a))

4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair. (40 CFR 63.181(h)(4) as referenced by 40 CFR 63.502(a))

5) Records of all analyses required in §§63.175(e) and 63.176(d) of 40 CFR 63 Subpart H. The records will include the following: (40 CFR 63.181(h)(5) as referenced by 40 CFR 63.502(a))

a) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices. (40 CFR 63.181(h)(5)(i) as referenced by 40 CFR 63.502(a))

b) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials. (40 CFR 63.181(h)(5)(ii) as referenced by 40 CFR 63.502(a))

c) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under §§63.175(e)(6)(iii) and 63.176(d)(6)(iii) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(5)(iii) as referenced by 40 CFR 63.502(a))

d) The beginning date and duration of performance trials of each candidate superior emission performing technology. (40 CFR 63.181(h)(5)(iv) as referenced by 40 CFR 63.502(a))

6) All records documenting the quality assurance program for valves or pumps as specified in §§63.175(e)(7) and 63.176(d)(7) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(6) as referenced by 40 CFR 63.502(a))

7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in §63.175(e)(7) and §63.176(d)(7) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(7) as referenced by 40 CFR 63.502(a))

8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in §63.176(d)(8) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(8) as referenced by 40 CFR 63.502(a))

9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services. (40 CFR 63.181(h)(9) as referenced by 40 CFR 63.502(a))

xix. Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR 63 Subpart H under §63.160 of 40 CFR 63 Subpart H. (40 CFR 63.181(j) as referenced by 40 CFR 63.502(a))

d. **VOC**

i. For Storage Vessels (T-2, T-2A, T-2B, T-2C, T-3, T-4, T-4A, T-4B, T-4C, and T-1),

1) For Storage Vessels (T-2 (when venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), T-2A, T-2B, T-2C, T-3, T-4, T-4A, T-4B and T-4C), the owner or operator shall keep a record of the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) are not in operation and venting to the atmosphere of any of these Emission Points occurs, that are, at the time, storing VOCs with a true vapor pressure equal to or greater than 1.5 psia (*i.e.*, times true vapor pressure of tank contents is equal to or greater than 1.5 psia and emissions are not controlled by the Flare Thermal Oxidizer and/or the Flare Control System).

2) For Storage Vessels (T-2 (when not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) and T-1), the owner or operator shall maintain a list of the materials that are stored in the vessel(s) and the corresponding vapor pressure. If the contents of the storage vessels are changed to a material not on the list, then a record shall be made of the new contents in order to demonstrate compliance with Additional Condition 1.d.i. These records shall be maintained for at least 5 years and be made available to the District upon request.

ii. For Storage Vessels (T-15M, T-15T, T-32, Day Tank 2, Day Tank 3, Day Tank 4, Day Tank 5, Day Tank 6, T-11M, T-12M, T-13M, T-13T, T-14, and D-3), there are no VOC compliance recordkeeping requirements for these Emission Points.

iii. For Emission Points (Truck Staining Oil Loading/Unloading (when loading), Railcar Staining Oil Loading/Unloading (when loading), Railcar Loading and Railcar Solvent Loading),

1) When loading more than 200 gallons but less than 20,000 gallons of volatile organic material (VOM) in any one day, there are no VOC compliance recordkeeping requirements for these Emission Points because all of the Emission Points are submerged fill/bottom loaded.

2) When loading 20,000 gallons or more of volatile organic materials (VOM) in any one day,

a) For Emission Points (Truck Staining Oil Loading/Unloading (when loading), Railcar Staining Oil Loading/Unloading (when loading), Railcar Loading (when being operated as a closed system) and Railcar Solvent Loading (when being operated as a closed system)), each of which is a closed system, there are no VOC compliance recordkeeping requirements because these Emission Points do not have a vent to the atmosphere.

b) For Emission Point (Railcar Loading), when not being operated as a closed system and is being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE), the owner or operator shall keep a record of the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) are not in operation while this Emission Point is loading more than 20,000 gallons a day of VOMs and not being operated as a Closed System.

c) For Emission Point (Railcar Solvent Loading), when not being operated as a closed system, the owner or operator shall maintain a list of the materials that are loaded and the corresponding true vapor pressure under actual storage conditions. If a material is changed to a material not on the list, then a record shall be made of the new material and its true vapor pressure under actual storage conditions in order to demonstrate compliance with Additional Condition 1.d.iii.2)c).

iv. For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, D-32, D-15, C-7, D-9, D-13, C-1, D-10, D-17, D-18, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, Reactor 1 through Reactor 13, D-24, D-25, D-26, D-27, D-28, D-29, T-5A, T-5B, T-5C, T-5D, T-5E, No. 1 Stripper Vessels, and No. 2 Stripper Vessels),

1) For Emission Points (D-32, D-15, D-18, D-7, D-28, D-29, T-5A, T-5B, T-5C, T-5D, and T-5E), the owner or operator shall keep a record of all the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) is not in operation and venting of any of these Emission Points occurs (*i.e.*, times emissions occur and are not controlled by the Flare Thermal Oxidizer and/or the Flare Control System). During these occurrences the owner or operator shall monthly calculate the lb/hr and lb/day VOC emissions for each Emission Point.

2) For Emission Points (D-13, D-1, D-39, D-5, D-38A, D-38B, D-6, and D-8), all of which are subject to Regulation 6.24 and are not vented to the Flare Thermal Oxidizer (C-FLARE-TO) and/or the Flare Control System (C-FLARE), the owner or operator submitted a one-time VOC compliance demonstration on July 25, 2003, which showed that the uncontrolled maximum VOC emissions at each emission point do not exceed the regulatory requirements of Regulation 6.24. Therefore there are no VOC monitoring, recordkeeping, or reporting requirements for these emission points. For the puposes of the compliance demonstrations, all Class II and Class III VOC mixtures were assumed to be Class II, which are the more stringent regulatory limits.

3) For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, C-7, D-9, C-1, D-10, D-17, Reactor 1

through Reactor 13, D-24, D-25, D-26, D-27, No. 1 Stripper Vessels, and No. 2 Stripper Vessels), there are no VOC recordkeeping requirements since these emission points are closed or closed pressurized systems that do not have a vent to the atmosphere.

v. For Emission Points (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line and No. 5 Line), the owner or operator shall maintain the following records for all periods of operation of the Finishing Building:

1) An identification of the control device, i.e., the specific coal-fired boiler or the Regenerative Thermal Oxidizer RTO-1, to which the exhaust gases from the Finishing Building were ducted; (Regulation 6.43, section 7.3.1)

2) An indicator, approved in writing by the District, of proper operation of the control device; (Regulation 6.43, section 7.3.2) (See Comment 19)

3) The average monthly calculated overall control efficiency (capture and control);

4) Number of times each month the VOC vent stream controlled by either C-U1/U2-BLR1/2 or C-U1/U2-RTO-1 by-passes both control devices and is vented to the atmosphere; (Construction Permit 354-94-C, dated June 1, 1994; and Construction Permit 58-95-C, dated March 10, 1995)

5) Duration of each by-pass; and (Construction Permit 354-94-C, dated June 1, 1994; and Construction Permit 58-95-C, dated March 10, 1995)

6) Calculated quantity of tons of VOC emitted for each by-pass. (Construction Permit 354-94-C, dated June 1, 1994; and Construction Permit 58-95-C, dated March 10, 1995)

vi. For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, D-16M, C-2, D-16, X-2T, C-2T, D-16T, D-59M, C-1A, D-10A, C-1T, D-10T, D-17T, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-28M, D-25T, D-26T, D-28T, D-64M, T-5F, T-5G, T-5H, T-5J, T-5K, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, D-30, D-30M, D-30T, T-9A, T-9B, T-9C, T-9D, T-9E/T, No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, No. 5 Line, and Heat Cleaning Oven),

1) For Emission Points (D-16M, D-16, D-16T, D-59M, D-10T (when not operating as a closed system and venting directly to the Flare

Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-18T, C-9M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28T, D-64M, T-5F, T-5G, T-5H, T-5J, and T-5K), the owner or operator shall keep a record of the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) is not in operation and venting of any of these Emission Points occurs (*i.e.*, times emissions occur and are not controlled by the Flare Thermal Oxidizer and/or the Flare Control System).

2) For Emission Points (D-30, D-30M, D-30T, No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), the owner or operator shall keep a record of all times stripping technology was not in operation or was by-passed, while the Finishing Lines were operating, such that VOC BACT was not in place.

3) For Emission Points (D-44, D-44M, and D-45M), the potential uncontrolled combined VOC emissions are less than 1 ton per year. Therefore there are no VOC recordkeeping requirements to meet the less than 1 ton per year standard.

4) For Emission Point (Heat Cleaning Oven),

a) The uncontrolled potential VOC emissions are less than 1 ton per year, therefore there are no monitoring requirements to meet the standard.

b) When the emission point is in operation, the owner or operator shall maintain records of the average batch cycle oxidizing or afterburner chamber temperature for each batch cycle. (Construction Permit 246-01-C, dated September 30, 2002)

5) For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, C-2, X-2T, C-2T, C-1A, D-10A, C-1T, D-10T (when operating as a closed system and not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-17T, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-25T, D-26T, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D, and T-9E/T), there are no recordkeeping requirements since these emission points are closed or closed pressurized systems that do not have a vent to the atmosphere.

vii. For Emission Points (No. 1 Line, No. 4 Line, and No. 5 Line), the owner or operator shall monthly calculate and record the monthly and 12 consecutive month VOC emissions from each Finishing Line (No. 1 Line, No. 4 Line, and

No. 5 Line) in order to demonstrate compliance with Additional Condition 1.d.vii. (Construction Permit # 23-88-C, dated March 16, 1988; Construction Permit # 116-89-C, dated May 1, 1989; Banking Permit 168-94-B, dated April 1, 1994; Construction Permit # 354-94-C, dated June 1, 1994; Construction Permit # 58-95-C, dated March 10, 1995)

viii. For U1/U2 VOC Emission Points, for any given day when operating, the owner or operator shall maintain the following records and monthly calculate daily VOC emissions by the formulas contained in Additional Condition 2.d.viii. If not operating on a given day, a negitive declaration may be entered into the appropriate record. (Regulation 1.05, section 4)

1) Daily production (pounds)
2) Monthly daily average inlet to front-end control device (Flare Thermal Oxidizer and/or Flare Control System)
3) Daily adjusted residual VOC
4) Monthly average bale residual VOC
5) Daily applicable control efficiencies (Flare Thermal Oxidizer and/or Flare Control System, and Boiler(s) or Regenerative Thermal Oxidizer RTO-1)
6) Monthly daily average solvent consumption
7) Daily average solvent in waste rubber

e. **PM**

i. For Emission Point (BU-1T), the owner or operator shall maintain a record of the inspections performed on the associated fabric filter C-U1/U2-DC-1T in accordance with Additional Condition 2.e.i.

ii. For Emission Point (Heat Cleaning Oven), the owner or operator submitted a one time PM compliance demonstration on July 25, 2003 showing that the potential uncontrolled PM hourly emissions are less than the standard in Regulation 7.08. Therefore, there are no monitoring, recordkeeping, or reporting requirements for this standard. (Construction Permit 246-01-C, dated September 30, 2002)

f. **Opacity**

For Emission Points (BU-1T and Heat Cleaning Oven), the owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date and time of the survey, the name (or initials) of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record. (Construction Permit 246-01-C, dated September 30, 2002)

g. **TAP**

i. For Emission Point (Railcar Loading) (when not operated as a Closed System and being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), the owner or operator shall keep a record of the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System are not in operation while this Emission Point is not being operated as a Closed System, and emissions occur that are not controlled by the Flare Thermal Oxidizer and/or the Flare Control System.

ii. For Emission Point (Railcar Solvent Loading and Heat Cleaning Oven), the owner or operator shall monthly calculate and record the average pound per hour TAP emissions and the ASL in order to demonstrate compliance with Additional Condition 1.g.ii. When the Railcar Solvent Loading is operated as a closed system, there are no monitoring, recordkeeping, or reporting requirements.

iii. For all Emission Unit U1/U2 Emission Points subject to Regulation 5.11 or 5.12 that emit the THF (tetrahydrofuran) TAP, the owner or operator submitted a THF TAP One-Time Compliance Demonstration on July 1, 2004 (as part of the Flare Thermal Oxidizer Construction Permit Application) that showed the potential, uncontrolled, TAP emissions (without consideration of the Flare Thermal Oxidizer (C-FLARE TO)) cannot exceed the ASL. The owner or operator also had, on July 25, 2003, submitted a THF TAP One-Time Compliance Demonstration that showed the potential, uncontrolled, TAP emissions (without consideration of the Flare Control System (C-FLARE)) cannot exceed the ASL. Therefore, the potential, uncontrolled, TAP emissions (without consideration of C-FLARE TO and/or C-FLARE) cannot exceed the ASL. There are thus no TAP compliance recordkeeping requirements for these Emission Points. (See Comment 20)

iv. For all other TAPs emitted from Emission Points where the TAP is not subject to a MACT, the owner or operator shall perform ASL TAP compliance demonstrations and maintain the records of the calculations. Modeling and RACT/BACT analyses required to be performed to demonstrate TAP compliance shall be submitted to the District for approval and a record of the modeling results and the RACT/BACT analyses maintained on site.

v. For all Emission Points subject to Regulation 5.11 or 5.12 that are closed systems, there are no TAP compliance monitoring requirements for these Emission Points.

h. **Fuel**

i. For the Flare Thermal Oxidizer (C-FLARE TO), the owner or operator shall maintain monthly records of all supplemental fuel combusted.

ii. For the Regenerative Thermal Oxidizer (C-U1/U2-RTO-1), the owner or operator shall maintain monthly records of all supplemental fuel combusted.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the 1,3-Butadiene Emissions Quarterly Reports, MACT Non-LDAR Periodic Reports, Other MACT Non-LDAR Reports, HAP Emissions Quarterly Reports, MACT LDAR Periodic Reports, Title V Semiannual Reports, VOC Combustion By-Pass Activity Quarterly Reports, and all other required reports. The required 1,3-Butadiene Quarterly Reports, the HAP Emissions Quarterly Reports and the VOC Combustion By-Pass Activity Quarterly Reports are contained in a single quarterly report entitled BD/HAP/VOC Quarterly Report. Duplicative reporting is not required. For example, information required to be submitted in the MACT Periodic Reports is not required to also be submitted in the Title V Semiannual Reports. If no deviations occur in a reporting period, the owner or operator shall report a negative declaration for the following. (See Comment 26)

a. **1,3-Butadiene**

i. **1,3-Butadiene Emissions Quarterly Reports**

The owner or operator shall report the following information within 30 days of the end of the calendar quarter. This 1,3-Butadiene emissions quarterly reporting shall be included in the BD/HAP/VOC Quarterly Report, which includes, in addition to this 1,3-Butadiene emissions quarterly reporting, the HAP Emissions Quarterly Reports required by Additional Condition 4.b.i. and the VOC Combustion By-Pass Activity Quarterly Reports required by Additional Condition 4.d.i. See Additional Conditions 4.b.i. and 4.d.i. (See Comment 25)

1) The plant-wide 1,3-butadiene emissions for each month in the quarter. This reporting shall contain the date, start time, and stop time for each diversion of the process vent stream flow from the Flare Thermal Oxidizer (C-FLARE TO) to the Flare Control System (C-FLARE). This reporting shall also contain the number of hours the process vent stream flow was diverted from the Flare Thermal Oxidizer to the Flare Control System for each month and 12 consecutive month period during the reporting period. (Construction Permit 112-04-C, dated August 31, 2004)

2) The date, start time, and stop time of any by-passes to the atmosphere that occurred during the month or a negative declaration if there were no by-passes to the atmosphere. (Construction Permit 112-04-C, dated August 31, 2004)

3) All times the gas flow (process vent stream plus the combustion air) exceeded the maximum gas flow during the month or a negative

declaration if there were no exceedances. (Construction Permit 112-04-C, dated August 31, 2004)

ii. **Title V Semiannual Reports (1,3-Butadiene)**

Upon start-up of the Flare Thermal Oxidizer and its use to process the vent stream currently controlled by the Flare Control System, the owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.b.ii., 4.c.ii., 4.d.ii., 4.e.ii., 4.f.ii., 4.g.ii., and 4.h. (Construction Permit 112-04-C, dated August 31, 2004)(See Comment 25)

1) Emission Unit ID number, Emission Point ID number, and control device ID.

2) The beginning and ending date of the reporting period.

3) Daily average values of the Flare Thermal Oxidizer combustion temperature for all operating days when the daily average values recorded were below the minimum combustion temperature established first by the Flare Thermal Oxidizer Construction Permit and then by the required performance testing.

4) Daily average values of the gas flow (process vent stream plus the combustion air) for all operating days when the daily average values recorded were above the maximum gas flow.

5) Duration of periods when monitoring data are not collected for each excursion caused by insufficient monitoring data. The 40 CFR Part 63 Subpart U definitions of excursion and insufficient monitoring data in 40 CFR 63.505(g), as well as the allowable excused excursions per 40 CFR 63.505(i), will be used for reporting purposes under this Additional Condition. (See Additional Conditions 4.b.iii.2)a) and 4.b.iii.2)c))

6) Description of any corrective action taken for each identified exceedance.

b. **HAP (Non-LDAR)**

i. **HAP Emissions Quarterly Reports**

The owner or operator shall report quarterly the total plant-wide emissions of each HAP for each month in the quarter, starting with the first calendar

quarter of 2004. This report is due no later than 30 days following the end of the calendar quarter. This HAP emissions quarterly reporting shall be included in the BD/HAP/VOC Quarterly Report, which includes, in addition to this HAP emissions quarterly reporting, the 1,3-Butadiene Emissions Quarterly Reports required by Additional Condition 4.a.i. and the VOC Combustion By-Pass Activity Quarterly Reports required by Additional Condition 4.d.i. (Construction Permits 321-03-C, dated September 30, 2003; 116-04-C, dated July 31, 2004; and 112-04-C, dated August 31, 2004) (See Comment 25)

ii. **Title V Semiannual Reports (Non-LDAR HAP)**

There are no Non-LDAR HAP Title V Semiannual Reporting requirements. Other information to included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.c.ii., 4.d.ii., 4.e.ii., 4.f.ii., 4.g.ii., and 4.h.

iii. **Subpart U MACT Non-LDAR HAP Periodic Reports**

The owner or operator shall submit a periodic report semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. (40 CFR 63.506(e)(6)(i)) (See Comment 25)

If none of the compliance exceptions in 40 CFR 63.506(e)(6)(iii) through (e)(6)(ix) occurred during the 6-month period, the Periodic Report shall be a statement that there were no compliance exceptions as described in 40 CFR 63.506(e)(6)(ii) for the 6-month period covered by that report and that none of the activities specified in 40 CFR 63.506(e)(6)(iii) through (e)(6)(ix) occurred during the 6-month period covered by that report. (40 CFR 63.506(e)(6)(ii)

The periodic report shall contain the following information: (40 CFR 63.506(e)(6)(iii))

1) All information specified in 40 CFR 63.122(a)(4) for storage vessels, 40 CFR 63.117(a)(3) and 63.118(f) and 63.485(s)(5) for continuous front-end process vents, 40 CFR 63.492 for batch front-end process vents and aggregate batch vent streams, 40 CFR 63.499 for back-end process operations, 40 CFR 63.104(f)(2) for heat exchange systems, and 40 CFR 63.146(c) through 63.146(g) for process wastewater. (40 CFR 63.506(e)(6)(iii)(A))

   a) 40 CFR 63.122(a)(4) applies to Group 1 Storage vessels, of which the source has none. This reporting citation is thus not applicable to the source. For Group 2 Storage Vessels (T-3

and T-1), there are no HAP Non-LDAR compliance reporting requirements for these Emission Points.

b) For Group 1 Continuous Front-End Process Vents (D-16M, D-16, D-16T and D-10T, the latter when venting directly to the Flare Thermal Oxidizer and/or the Flare Control System and not being operated as a Closed System), as well as for Group 2 Continuous Front-End Process Vents with TRE greater than 1.0 but less than or equal to 4.0 that are considered, per 40 CFR 63.115(d)(1)(ii) as referenced by 40 CFR 63.485, Group 1 Continuous Front-End Process Vents (T-5A, T-5B, T-5C, T-5D, T-5E, T-5F, T-5G, T-5H, T-5J and T-5K):, the owner or operator shall report:

(A) For any subsequent TRE determinations or performance tests conducted after the Notification of Compliance Status has been submitted, the data in 40 CFR 63.117(a)(4) through (a)(8) shall be reported in the next Periodic Report. (40 CFR 63.117(a)(3) as referenced by 40 CFR 63.485(i) and 63.506(e)(6)(iii)(A))

(B) For the Flare Thermal Oxidizer (C-FLARE TO) upon start-up and when being used to meet the Group 1 Continuous Front-End Process Vent requirements: Reports of daily average values of monitored parameters (combustion temperature) for all operating days when the daily average values recorded under §§63.118(a) and (b) were outside the ranges established first by the Construction Permit and then by the required performance testing. (40 CFR 63.118(f)(1) as referenced by 63.506(e)(6)(iii)(A))

(C) For Group 1 Continuous Front-End Process Vents (and those Continuous Front-End Process Vents considered as Group 1), reports of the duration of periods when monitoring data are not collected for each excursion caused by insufficient monitoring data as defined in §63.505(g). (40 CFR 63.118(f)(2) as referenced by 63.506(e)(6)(iii)(A) and 40 CFR 63.485(j))

(D) The times and durations of all periods recorded under 40 CFR 63.118(a)(3) when the gas stream is diverted to the atmosphere through a by-pass line. (40 CFR

63.118(f)(3) as referenced by 40 CFR 63.506(e)(6)(iii)(A))

(E) For the Flare Control System (C-FLARE) when being used to meet the Group 1 Continuous Front-End Process Vent requirements: The times and durations of all periods recorded in 40 CFR 63.118(a)(2) in which all pilot flames of a flare were absent. (40 CFR 63.118(f)(5) as referenced by 40 CFR 63.506(e)(6)(iii)(A))

(F) 40 CFR 63.485(s)(5) applies to internal combustion engines used to meet the Group 1 Continuous Front-End Process Vent requirements, an option the source has not elected to use. This reporting citation is thus not applicable to the source.

c) 40 CFR 63.492 applies to Batch Front-End Process Vents and Aggregate Batch Vent Streams, of which the source has none. This reporting citation is thus not applicable to the source. (See Comment 3)

d) The 40 CFR Part 63 Subpart U MACT Non-LDAR Periodic Reporting requirements of 40 CFR 63.499 apply to Back-End Process Operations using stripping technology and demonstrating compliance through stripper parameter monitoring, the latter of which the source has not elected to use. (The source demonstrates compliance by sampling.) This reporting citation is thus not applicable to the source. (See Comment 6)

e) For heat exchange systems, the following requirements of 40 CFR 63.104(f)(2) apply.

If an owner or operator invokes the delay of repair provisions for a heat exchange system, the following information shall be submitted in the next semi-annual periodic report required by 40 CFR 63.152(c). If the leak remains unrepaired, the information shall also be submitted in each subsequent periodic report, until repair of the leak is reported. (40 CFR 63.104(f)(2) as referenced by 40 CFR 63.502(n))

(A) The owner or operator shall report the presence of the leak and the date that the leak was detected. (40 CFR 63.104(f)(2)(i) as referenced by 40 CFR 63.502(n))

(B) The owner or operator shall report whether or not the leak has been repaired. (40 CFR 63.104(f)(2)(ii) as referenced by 40 CFR 63.502(n))

(C) The owner or operator shall report the reason(s) for delay of repair. If delay of repair is invoked due to the reasons described in 40 CFR 63.104(e)(2), documentation of emissions estimates must also be submitted. (40 CFR 63.104(f)(2)(iii) as referenced by 40 CFR 63.502(n))

(D) If the leak remains unrepaired, the owner or operator shall report the expected date of repair. (40 CFR 63.104(f)(2)(iv) as referenced by 40 CFR 63.502(n))

(E) If the leak is repaired, the owner or operator shall report the date the leak was successfully repaired. (40 CFR 63.104(f)(2)(v) as referenced by 40 CFR 63.502(n))

f) 40 CFR 63.146(c) through 63.146(g) applies to Group 1 Process Wastewater, of which the source has none. This reporting citation is thus not applicable to the source. (See Comment 9)

2) The daily average values of monitored parameters for all excursions as defined in 40 CFR 63.505(g) and (h). For excursions caused by lack of monitoring data, the start time and durations of periods when monitoring data were not collected shall be specified. (40 CFR 63.506 (e)(6)(iii)(B))

a) For Group 1 Continuous Front-End Process Vents (D-16M, D-16, D-16T and D-10T, the latter when venting directly to the Flare Thermal Oxidizer and/or the Flare Control System and not being operated as a Closed System) complying through use of the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE); Group 2 Continuous Front-End Process Vents with TRE greater than 1.0 but less than or equal to 4.0 that are considered, per 40 CFR 63.115(d)(1)(ii) as referenced by 40 CFR 63.485, Group 1 Continuous Front-End Process Vents (T-5A, T-5B, T-5C, T-5D, T-5E, T-5F, T-5G, T-5H, T-5J and T-5K) complying through use of the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE); and for Back-End Process Operations (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), when stripping technology alone does not result in meeting the residual organic HAP limitation

in Additional Condition 1.b.x., and the combination of stripping technology and the Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) is used to meet this limitation. For the control devices C-FLARE TO, C-FLARE and C-U1/U2-RTO-1, when being used to comply with the Subpart U MACT requirements, an excursion means any of the three cases listed in 40 CFR 63.505(g)(1)(i) through (g)(1)(iii). For a control device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria in 40 CFR 63.505(g)(1)(i) through (g)(1)(iii), this is considered a single excursion for the control device. For each excursion, the owner or operator shall be deemed out of compliance with the provisions of 40 CFR 63 Subpart U, except as provided in 40 CFR 63.505(i). (40 CFR 63.505(g)(1) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(A) When the daily average value of one or more monitored parameters is above the maximum level or below the minimum level established for the given parameters. (40 CFR 63.505(g)(1)(i))

(B) When the period of control device operation, with the exception noted in 40 CFR 63.505(g)(1)(v), is 4 hours or greater in an operating day and monitoring data are insufficient, as defined in 40 CFR 63.505(g)(1)(iv), to constitute a valid hour of data for at least 75% of the operating hours. (40 CFR 63.505(g)(1)(ii))

(C) When the period of control device operation, with the exception noted in 40 CFR 63.505(g)(1)(v), is less than 4 hours in an operating day and more than two of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in 40 CFR 63.505(g)(1)(iv). (40 CFR 63.505(g)(1)(iii))

(D) Monitoring data are insufficient to constitute a valid hour of data, as used in 40 CFR 63.505(g)(1)(ii) and (g)(1)(iii), if measured values are unavailable for any of the 15-minute periods within the hour. For data compression systems approved under 40 CFR 63.506(g)(3), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour. (40 CFR 63.505(g)(1)(iv))

(E) The periods listed in 40 CFR 63.505(g)(1)(v)(A) through (g)(1)(v)(E) are not considered to be part of the period of control device operation, for the purposes of 40 CFR 63.505(g)(1)(ii) and (g)(1)(iii). (40 CFR 63.505(g)(1)(v))

(1) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; (40 CFR 63.505(g)(1)(v)(A))

(2) Start-ups; (40 CFR 63.505(g)(1)(v)(B))

(3) Shutdowns; (40 CFR 63.505(g)(1)(v)(C))

(4) Malfunctions; or (40 CFR 63.505(g)(1)(v)(D))

(5) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies. (40 CFR 63.505(g)(1)(v)(E))

b) For Back-End Process Operations (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), complying through the use of stripping technology, and demonstrating compliance by sampling, an excursion means one of the two cases listed in 40 CFR 63.505(h)(1)(i) and (h)(1)(ii). For each excursion, the owner or operator shall be deemed out of compliance with the provisions of 40 CFR 63 Subpart U, except as provided in 40 CFR 63.505(i). (40 CFR 63.505(h)(1) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(A) When the monthly weighted average residual organic HAP content is above the applicable residual organic HAP limitation in Additional Condition 1.b.x.; or (40 CFR 63.505(h)(1)(i) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(B) When less than 75 percent of the samples required in 1 month are taken and analyzed in accordance with the provisions of Additional Condition 2.b.x.2). (40 CFR 63.505(h)(1)(ii) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

c) A number of excused excursions shall be allowed for each control device (C-FLARE TO, C-FLARE and C-U1/U2-RTO-1) and for stripping technology for each semiannual period. The number of excused excursions for each semiannual period is specified in 40 CFR 63.505(i)(1) through (i)(6). 40 CFR 63.505(i) applies to affected sources required to submit Periodic Reports semiannually or quarterly. The first semiannual period is the 6-month period starting the date the Notification of Compliance Status is due. (40 CFR 63.505(i) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(A) For the first semiannual period—six excused excursions. (40 CFR 63.505(i)(1) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(B) For the second semiannual period—five excused excursions. (40 CFR 63.505(i)(2) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(C) For the third semiannual period—four excused excursions. (40 CFR 63.505(i)(3) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(D) For the fourth semiannual period—three excused excursions. (40 CFR 63.505(i)(4) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(E) For the fifth semiannual period—two excused excursions. (40 CFR 63.505(i)(5) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

(F) For the sixth and all subsequent semiannual periods—one excused excursion. (40 CFR 63.505(i)(6) as referenced by 40 CFR 63.506(e)(6)(iii)(B))

3) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The owner or operator is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the owner or operator notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the owner or operator is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time. (40 CFR 63.506(e)(6)(iii)(D)(2))

4) Notification if one or more Emission Points, as defined in 40 CFR 63.482, (other than equipment leaks), or one or more EPPU is added to an affected source. The owner or operator shall submit the information contained in Additional Conditions 4.b.iii.4)a) and b). (40 CFR 63.506(e)(6)(iii)(D)(3))

a) A description of the addition to the affected source; and (40 CFR 63.506(e)(6)(iii)(D)(3)(i))

b) Notification of the group status of the additional emission point or all emission points as defined in 40 CFR 63.482 in the EPPU. (40 CFR 63.506(e)(6)(iii)(D)(3)(ii))

5) The information in 40 CFR 63.506(b)(1)(ii) for reports of startup, shutdown, and malfunction. (40 CFR 63.506(e)(6)(iii)(E))

6) If any performance tests are reported in a Periodic Report, the following information shall be included: (40 CFR 63.506(e)(6)(v))

a) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in 40 CFR 63.506(e)(5)(i)(B). (40 CFR 63.506(e)(6)(v)(A))

b) For additional tests performed for the same kind of emission point using the same method, results and any other information, pertaining to the performance test, that is requested on a case-by-case basis by the Administrator shall be submitted, but a complete test report is not required. (40 CFR 63.506(e)(6)(v)(B))

7) Notification of a change in the primary product of an EPPU, in accordance with the provisions in 40 CFR 63.480(f). This includes a change in primary product from one elastomer product to either another elastomer product or to a non-elastomer product. (40 CFR 63.506(e)(6)(vi)) (See Comments 5 and 10)

8) There are no HAP MACT Non-LDAR Periodic Reporting compliance requirements for the following Emission Points:

a) Group 2 Storage Vessels (T-3 and T-1) of Additional Condition 1.b.i.;

b) For Emission Points (T-2, Day Tank 4, Day Tank 5 and Day Tank 6, when each is not being used as a Surge Control Vessel and is being used to store styrene) of Additional Condition 1.b.ii.;

c) Group 2 Continuous Front-End Process Vents with TRE greater than 4.0 (D-59M, D-32, D-15, D-13, D-18, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28, D-28T, D-64M, D-29, D-30, D-30M and D-30T) of Additional Condition 1.b.v.;

d) Surge Control Vessels (T-2 (when used as a Surge Control Vessel), T-2A, T-2B, T-2C, T-4, T-4A, T-4B, T-4C, T-15M, T-15T, T-32, Day Tank 2, Day Tank 3, Day Tank 4 (when used as a Surge Control Vessel), Day Tank 5 (when used as a Surge Control Vessel) and Day Tank 6 (when used as a Surge Control Vessel)) of Additional Condition 1.b.vi.; (See Comment 11)

e) Closed System or Closed Pressurized System Emission Points (X-2M, C-2M, X-2, C-2, X-2T, C-2T, C-7, D-9, C-1, D-10, C-1A, D-10A, C-1T, D-10T (when operated as a Closed System and not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE)), D-17, D-17T, Reactor 1 through Reactor 13, Reactor 14, D-24, D-24M, D-24T, D-25M, D-26M, D-25, D-26, D-27, D-25T, D-26T, No. 1 Stripper Vessels, No. 2 Stripper Vessels, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D and T-9E/T) of Additional Condition 1.b.vii.

iv. **Other Subpart U MACT Non-LDAR HAP Reports**

1) Whenever a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 Continuous Front-End Process Vent to become a Group 1 Continuous Front-End Process Vent, the owner or operator shall submit a report within 180 days after the process change is made or with the next Non-LDAR Periodic Report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the owner or operator of the affected source shall comply with the Group 1 provisions in 40 CFR 63.113 through 63.118 in accordance with 40 CFR 63.480(i)(2)(ii) or (i)(2)(iii), as applicable. (40 CFR 63.485(l)(1))

2) Whenever a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 Continuous Front-End Process Vent with a TRE greater than 4.0 to become a Group 2 Continuous Front-End Process Vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 days after the process change is made or with the next Non-LDAR Periodic Report, whichever is later. A

description of the process change shall be submitted with the report of the process change, and the owner or operator shall comply with the provisions in 40 CFR 63.113(d) by the dates specified in 40 CFR 63.481. (40 CFR 63.485(l)(2))

3) Whenever a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 Continuous Front-End Process Vent with a flow rate less than 0.005 standard cubic meter per minute (scmm) to become a Group 2 Continuous Front-End Process Vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or with the next Non-LDAR Periodic Report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the owner or operator shall comply with the provisions in 40 CFR 63.113(d) by the dates specified in 40 CFR 63.481. (40 CFR 63.485(l)(3))

4) Whenever a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 Continuous Front-End Process Vent with an organic HAP concentration less than 50 parts per million by volume (ppmv) to become a Group 2 Continuous Front-End Process Vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or with the next Non-LDAR Periodic Report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the owner or operator shall comply with the provisions in 40 CFR 63.113(d) by the dates specified in 40 CFR 63.481. (40 CFR 63.485(l)(4))

5) The owner or operator is not required to submit a report of a process change if one of the following conditions is met. (40 CFR 63.485(l)(5))

a) The change does not meet the description of a process change in 40 CFR 63.115(e); (40 CFR 63.485(l)(5)(i)

b) The vent stream flow rate is recalculated according to 40 CFR 63.115(e) and the recalculated value is less than 0.005 standard cubic meter per minute; (40 CFR 63.485(l)(5)(ii))

c) The organic HAP concentration of the vent stream is recalculated according to 40 CFR 63.115(e) and the recalculated value is less than 50 parts per million by volume; or (40 CFR 63.485(l)(5)(iii))

d) The TRE index value is recalculated according to 40 CFR 63.115(e) and the recalculated value is greater than 4.0. (40 CFR 63.485(l)(5)(iv))

6) For Back-End Process Operations (No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), whenever a process change, as defined in 40 CFR 63.496(d), is made that causes the redetermination of the compliance status for the Back-End Process Operations, the owner or operator shall submit a report within 180 days after the process change as specified in 40 CFR 63.506(e)(7)(iii). The report shall include: (40 CFR 63.499(d))

a) A description of the process change; (40 CFR 63.499(d)(1))

b) The results of the redetermination of the compliance status, determined in accordance with 40 CFR 63.496(b), and recorded in accordance with 40 CFR 63.498(d)(1), and (40 CFR 63.499(d)(2))

c) Documentation of the re-establishment of a parameter level for the control or recovery device, defined as either a maximum or minimum operating parameter, that indicates proper operation of the control or recovery device, in accordance with §63.497(c) and recorded in accordance with §63.498(d)(2). (40 CFR 63.499(d)(3))

7) Owners or operators of EPPU or emission points (other than equipment leak components subject to §63.502) that are subject to §63.480(i)(1) or (i)(2) shall submit a report as specified in 40 CFR 63.506(e)(7)(v)(A) and (B) as follows. (40 CFR 63.506(e)(7)(v))

a) Reports shall include: (40 CFR 63.506(e)(7)(v)(A))

(A) A description of the process change or addition, as appropriate; (40 CFR 63.506(e)(7)(v)(A)(1))

(B) The planned start-up date and the appropriate compliance date, according to §63.480(i)(1) or (2); (40 CFR 63.506(e)(7)(v)(A)(2))

(C) Identification of the group status of emission points (except equipment leak components subject to the requirements in §63.502) specified in 40 CFR 63.506(e)(7)(v)(A)(3)(i) through (iii), as applicable. (40 CFR 63.506(e)(7)(v)(A)(3))

b) Reports shall be submitted as specified in 40 CFR 63.506(e)(7)(v)(B)(1) through (e)(7)(v)(B)(3), as appropriate. (40 CFR 63.506(e)(7)(v)(B))

c. **HAP (LDAR)**

i. **HAP LDAR Quarterly Reports**

There are no HAP LDAR Quarterly Reporting requirements. (See Comment 25)

ii. **Title V Semiannual Reports (LDAR HAP)**

There are no LDAR HAP Title V Semiannual Reporting requirements. Other information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.b.ii., 4.d.ii., 4.e.ii., 4.f.ii., 4.g.ii., and 4.h.

iii. **Subpart U MACT LDAR HAP Periodic Reports**

The owner or operator shall report the information listed in Additional Conditions 4.c.iii.1) through 4.c.iii.14) in the LDAR HAP Periodic Reports submitted semiannually under the conditions specified in 40 CFR 63.182(d), as directed by 40 CFR 63.506(e)(6), to the Air Pollution Control District and U.S. EPA Region 4. In accordance with 40 CFR 63.481(m)(1), the source has requested, and it has been approved by the District, that the required monitoring and reporting for equipment leaks under 40 CFR 63.502 be performed on a calendar year basis. (40 CFR 63.182(d)(1) as referenced by 40 CFR 63.502(a), and 40 CFR 63.481(m)(1)) (See Comment 25)

1) The number of valves for which leaks were detected as described in 40 CFR 63.168(b), the percent leakers, and the total number of valves monitored; (40 CFR 63.182(d)(2)(i) as referenced by 40 CFR 63.502(a))

2) The number of valves for which leaks were not repaired as required in 40 CFR 63.168(f), identifying the number of those that are determined nonrepairable; (40 CFR 63.182(d)(2)(ii) as referenced by 40 CFR 63.502(a))

3) The number of pumps for which leaks were detected as described in 40 CFR 63.163(b), the percent leakers, and the total number of pumps monitored; (40 CFR 63.182(d)(2)(iii) as referenced by 40 CFR 63.502(a)) (See Comment 15)

4) The number of pumps for which leaks were not repaired as required in 40 CFR 63.163(c); (40 CFR 63.182(d)(2)(iv) as referenced by 40 CFR 63.502(a)) (See Comment 15)

5) The number of agitators for which leaks were detected as described in 40 CFR 63.173(a) and (b); (40 CFR 63.182(d)(2)(vii) as referenced by 40 CFR 63.502(a))

6) The number of agitators for which leaks were not repaired as required in 40 CFR 63.173(c); (40 CFR 63.182(d)(2)(viii) as referenced by 40 CFR 63.502(a))

7) The number of connectors for which leaks were detected as described in 40 CFR 63.174(a), the percent of connectors leaking, and the total number of connectors monitored; (40 CFR 63.182(d)(2)(ix) as referenced by 40 CFR 63.502(a))

8) The number of connectors for which leaks were not repaired as required in 40 CFR 63.174(d), identifying the number of those that are determined nonrepairable; (40 CFR 63.182(d)(2)(xi) as referenced by 40 CFR 63.502(a))

9) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible. (40 CFR 63.182(d)(2)(xiii) as referenced by 40 CFR 63.502(a))

10) If applicable, the results of all monitoring to show compliance with 40 CFR 63.164(i), 63.165(a), and 63.172(f) conducted within the semiannual reporting period. (40 CFR 63.182(d)(2)(xiv) as referenced by 40 CFR 63.502(a))

11) If applicable, the initiation of a monthly monitoring program under 40 CFR 63.168(d)(1)(i), or a quality improvement program under either 40 CFR 63.175 or 63.176. (40 CFR 63.182(d)(2)(xv) as referenced by 40 CFR 63.502(a))

12) If applicable, notification of a change in connector monitoring alternatives as described in 40 CFR 63.174(c)(1). (40 CFR 63.182(d)(2)(xvi) as referenced by 40 CFR 63.502(a))

13) If applicable, the compliance option that has been selected under 40 CFR 63.172(n). (40 CFR 63.182(d)(2)(xvii) as referenced by 40 CFR 63.502(a))

14) The information listed in 40 CFR 63.182(c) for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance

Status, if the method of compliance has changed since the last report. (40 CFR 63.182(d)(4) as referenced by 40 CFR 63.502(a))

d. **VOC**

i. **VOC Combustion By-Pass Activity Quarterly Reports**

The owner or operator shall report the following information regarding VOC Combustion By-Pass Activity within 30 days of the end of the calendar quarter. This VOC Combustion By-Pass Activity quarterly reporting shall be included in the BD/HAP/VOC Quarterly Report, which includes, in addition to this VOC Combustion By-Pass Activity quarterly reporting, the 1,3-Butadiene Emissions Quarterly Reports required by Additional Condition 4.a.i. and the HAP Emissions Quarterly Reports required by Additional Condition 4.b.i. See Additional Conditions 4.a.i. and 4.b.i. (Construction Permits 354-94-C, dated June 1, 1994 and 58-95-C, dated March 10, 1995) (See Comment 25)

1) Number of times the VOC vent stream controlled by either C-U1/U2-BLR1/2 or C-U1/U2-RTO-1 by-passes both control devices and is vented to the atmosphere;

2) Duration of each by-pass; and

3) Calculated quantity of tons of VOC emitted for each by-pass.

ii. **Title V Semiannual Reports (VOC)**

The owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.b.ii., 4.c.ii., 4.e.ii., 4.f.ii., 4.g.ii., and 4.h. (See Comment 25)

1) For Storage Vessels (T-2, T-2A, T-2B, T-2C, T-3, T-4, T-4A, T-4B, T-4C, and T-1), the owner or operator shall report the following.

a) For Storage Vessels (T-2 (when venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), T-2A, T-2B, T-2C, T-3, T-4, T-4A, T-4B and T-4C):

(A) Emission Unit ID number and Emission Point ID number.

(B) The beginning and ending date of the reporting period.

(C) Identification of each exceedance of the VOC Standard (*i.e.*, the periods of time (date, start time, and stop time) that the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) were not in operation and the true vapor pressure of the Emission Point's VOC contents was equal to or greater than 1.5 psia).

(D) Description of any corrective action taken for each identified exceedance.

b) For Storage Vessels (T-2 (when not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)) and T-1), there are no VOC Title V compliance reporting requirements for these Emission Points.

2) For Storage Vessels (T-15M, T-15T, T-32, Day Tank 2, Day Tank 3, Day Tank 4, Day Tank 5, Day Tank 6, T-11M, T-12M, T-13M, T-13T, T-14, and D-3), there are no VOC Title V compliance reporting requirements for these Emission Points.

3) Emission Points (Truck Staining Oil Loading/Unloading (when loading) and Railcar Staining Oil Loading/Unloading (when loading), Railcar Loading and Railcar Solvent Loading), the owner or operator shall report the following.

a) When loading more than 200 gallons but less than 20,000 gallons of volatile organic materials (VOM) in any one day, there are no VOC Title V compliance reporting requirements for these Emission Points.

b) When loading 20,000 gallons or more of volatile organic materials (VOM) in any one day:

(A) For Emission Points (Truck Staining Oil Loading/Unloading (when loading), Railcar Staining Oil Loading/Unloading (when loading), Railcar Loading (when being operated as a closed system) and Railcar Solvent Loading (when being operated as a closed system)), each of which is a closed system, there are there are no VOC Title V compliance reporting requirements.

(B) For Emission Point (Railcar Loading), when not being operated as a closed system,

(1) Emission Unit ID number and Emission Point ID number.

(2) The beginning and ending date of the reporting period.

(3) Identification of each exceedance of the VOC Standard (*i.e.*, the periods of time (date, start time, and stop time) that the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) were not in operation while this Emission Point was loading more than 20,000 gallons a day of VOMs and not being operated as a Closed System) and the amount in gallons of VOM material loaded.

(4) Description of any corrective action taken for each identified exceedance.

(C) For Emission Point (Railcar Solvent Loading), when not being operated as a closed system, there are no VOC Title V compliance reporting requirements for this Emission Point.

4) For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, D-32, D-15, C-7, D-9, D-13, C-1, D-10, D-17, D-18, D-1, D-39, D-7, D-5, D-38A, D-38B, D-6, D-8, Reactor 1 through Reactor 13, D-24, D-25, D-26, D-27, D-28, D-29, T-5A, T-5B, T-5C, T-5D, T-5E, No. 1 Stripper Vessels and No. 2 Stripper Vessels), the owner or operator shall report the following.

a) For Emission Points (D-32, D-15, D-18, D-7, D-28, D-29, T-5A, T-5B, T-5C, T-5D and T-5E):

(A) Emission Unit ID number and Emission Point ID number.

(B) The beginning and ending date of the reporting period.

(C) Identification of each exceedance of the VOC Standard (*i.e.*, the periods of time (date, start time, and stop time) that the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) were not in operation and venting of the Emission Point occurred such that the Regulation 6.24 standard was exceeded (hourly and/or daily limits), the standard from Regulation 6.24 (hourly and/or daily limits) and the amount of VOC emissions).

(D) Description of any corrective action taken for each identified exceedance.

b) For Emission Points (D-13, D-1, D-39, D-5, D-38A, D-38B, D-6 and D-8), there are no VOC Title V compliance reporting requirements for these Emission Points.

c) For Emission Points (Truck Staining Oil Loading/Unloading (when unloading), Truck Chemical Addition Materials Unloading, General Tank Farm Railcar Unloading, Railcar Staining Oil Loading/Unloading (when unloading), Railcar Chemical Addition Materials Unloading, X-2, C-7, D-9, C-1, D-10, D-17, Reactor 1 through Reactor 13, D-24, D-25, D-26, D-27, No. 1 Stripper Vessels and No. 2 Stripper Vessels), there are no VOC Title V compliance reporting requirements for these Emission Points.

5) For Emission Points (No. 1 Line, No. 2 Line, No 3 Line, No. 4 Line and No. 5 Line), the owner or operator shall report the following.

a) Emission Unit ID number and Emission Point ID number.

b) The beginning and ending date of the reporting period.

c) Identification of each exceedance of the VOC Standard (*i.e.*, all months for which the average monthly calculated overall control efficiency (capture and control) was less than 80%).

d) Description of any corrective action taken for each identified exceedance.

6) For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, D-16M, C-2, D-16, X-2T, C-2T, D-16T, D-59M, C-1A, D-10A, C-1T, D-10T, D-17T, D-18T, C-9M, D-44, D-44M, D-45M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-28M, D-25T, D-26T, D-28T, D-

64M, T-5F, T-5G, T-5H, T-5J, T-5K, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, D-30, D-30M, D-30T, T-9A, T-9B, T-9C, T-9D, T-9E/T, No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, No. 5 Line and Heat Cleaning Oven), the owner or operator shall report the following.

a) For Emission Points (D-16M, D-16, D-16T, D-59M, D-10T (when not operating as a closed system and venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-18T, C-9M, D-7M, D-5M, D-56M, D-57M, D-8M, D-19M, D-20M, D-69M, D-68M, D-155M, D-60M, D-61M, D-67M, D-66M, D-28M, D-28T, D-64M, T-5F, T-5G, T-5H, T-5J, and T-5K):

(A) Emission Unit ID number and Emission Point ID number.

(B) The beginning and ending date of the reporting period.

(C) Identification of each exceedance of the VOC Standard (*i.e.*, the periods of time (date, start time, and stop time) that the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) were not in operation and venting of the Emission Point occurred, the standard that was exceeded (VOC BACT), and the amount of the exceedance).

(D) Description of any corrective action taken for each identified exceedance.

b) For Emission Points (D-30, D-30M, D-30T, No. 1 Line, No. 2 Line, No. 3 Line, No. 4 Line, and No. 5 Line), there are no reporting requirements since the material has to be stripped (VOC BACT) prior to these Emission Points.

c) For Emission Points (D-44, D-44M and D-45M): There are no VOC Title V compliance reporting requirements for these Emission Points.

d) For Emission Point (Heat Cleaning Oven):

(A) VOC Annual Emissions: There are no VOC Title V compliance reporting requirements for this Emission Point.

(B) For the period of time Emission Point (Heat Cleaning Oven) is in operation, the owner or operator shall report the following. (Construction Permit 246-01-C, dated September 30, 2002)

(1) Emission Unit ID number and Emission Point ID number.

(2) The beginning and ending date of the reporting period.

(3) Identification of all batches (batch identification, date and time) for which the average batch cycle oxidizing or afterburner chamber temperature was less than 1450ºF.

(4) Description of any corrective action taken for each identified exceedance, including measures taken to minimize the extent and duration of the excess emissions.

e) For Emission Points (General Tank Farm Truck Unloading, X-2M, C-2M, C-2, X-2T, C-2T, C-1A, D-10A, C-1T, D-10T (when operating as a closed system and not venting directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), D-17T, Reactor 14, D-24M, D-24T, D-25M, D-26M, D-25T, D-26T, No. 3 Stripper Vessels, No. 4 Stripper Vessels, No. 5 Stripper Vessels, T-9A, T-9B, T-9C, T-9D and T-9E/T), there are no VOC Title V compliance reporting requirements for these Emission Points.

7) For Emission Points (No. 1 Line, No. 4 Line, and No. 5 Line), the owner or operator shall report the following.

a) Emission Unit ID number and Emission Point ID number.

b) The beginning and ending date of the reporting period.

c) Identification of each exceedance of the VOC Standard (*i.e.*, all periods of time for which the 12-consecutive month and/or monthly VOC emissions limits of Additional Condition 1.d.vii. were exceeded).

d) Description of any corrective action taken for each identified exceedance.

8) For U1/U2 VOC Emission Points, there are no Regulation 1.05 VOC Title V compliance reporting requirements for daily VOC emissions.

9) For Emission Points (Line No.1, Line No. 2, Line No. 3, Line No. 4 and Line No. 5), see VOC Combustion By-Pass Activity Quarterly Reports of Additional Condition 4.d.i.

iii. **Other VOC Reports**

There are no other VOC compliance reporting requirements. See Additional Conditions 4.d.i. and 4.d.ii.

e. **PM**

i. **PM Quarterly Reports**

There are no PM Quarterly Reporting requirements.

ii. **Title V Semiannual Reports (PM)**

The owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.b.ii., 4.c.ii., 4.d.ii., 4.f.ii., 4.g.ii., and 4.h. (See Comment 25)

1) For Emission Point (BU-1T), the owner or operator shall report the following.

a) Emission unit ID number and emission point and/or control device ID number;

b) The beginning and ending date of the reporting period; and

c) Identification of any corrective actions performed pursuant to Additional Condition 2.e.i.

2) For Emission Point (Heat Cleaning Oven), there are no PM Title V compliance reporting requirements for this Emission Point. (Construction Permit 246-01-C, dated September 30, 2002)

iii. **Other PM Reports**

There are no other PM compliance reporting requirements. See Additional Conditions 4.e.i. and 4.e.ii.

f. **Opacity**

i. **Opacity Quarterly Reports**

There are no Opacity Quarterly Reporting requirements.

ii. **Title V Semiannual Reports (Opacity)**

The owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.b.ii., 4.c.ii., 4.d.ii., 4.e.ii., 4.g.ii., and 4.h.

For Emission Points (BU-1T and Heat Cleaning Oven), the owner or operator shall report the following. (Construction Permit 246-01-C, dated September 30, 2002)

1) Emission unit ID number and emission point and/or stack ID number;

2) The beginning and ending date of the reporting period;

3) The date, time and results of each visible emissions survey conducted that resulted in visible emissions being observed. If no visible emissions were observed during the reporting period, the owner or operator may submit a negative declaration;

4) The date, time and results of each Method 9 conducted. If there were no Method 9 tests performed during the reporting period, the owner or operator may submit a negative declaration; and

5) Description of any corrective action taken.

iii. **Other Opacity Reports**

There are no other Opacity compliance reporting requirements. See Additional Condition 4.f.i. and 4.f.ii.

g. **TAP**

i. **TAP Quarterly Reports**

There are no TAP Quarterly Reporting requirements.

ii. **Title V Semiannual Reports (TAP)**

The owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.b.ii., 4.c.ii., 4.d.ii., 4.e.ii., 4.f.ii., and 4.h. (See Comment 25)

1) For Emission Point (Railcar Loading) (when not operated as a Closed System and being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE)), the owner or operator shall report the following.

   a) Emission Unit ID number and Emission Point ID number.

   b) The beginning and ending date of the reporting period.

   c) Identification of each exceedance of the TAP RACT requirement (*i.e.*, the periods of time the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System were not in operation while this Emission Point was not being operated as a Closed System, and emissions occurred that were not controlled by the Flare Thermal Oxidizer and/or the Flare Control System).

   d) Description of any corrective action taken for each identified exceedance.

2) For all Emission Unit U1/U2 Emission Points subject to Regulation 5.11 or 5.12 that emit the THF (tetrahydrofuran) TAP, the owner or operator submitted a THF TAP One-Time Compliance Demonstration on July 1, 2004 (as part of the Flare Thermal Oxidizer Construction Permit Application) that showed the potential, uncontrolled, TAP emissions (without consideration of the Flare Thermal Oxidizer (C-FLARE TO)) cannot exceed the ASL. The owner or operator also had, on July 25, 2003, submitted a THF TAP One-Time Compliance Demonstration that showed the potential, uncontrolled, TAP emissions (without consideration of the Flare Control System (C-FLARE)) cannot exceed the ASL. Therefore, the potential, uncontrolled, TAP emissions (without consideration of C-FLARE TO and/or C-FLARE) cannot exceed the ASL. There are thus no TAP Title V compliance reporting requirements for these Emission Points.

3) For all other TAPs emitted from Emission Points where the TAP is not subject to a MACT, there are no TAP Title V compliance reporting requirements.

4) For all Emission Points subject to Regulation 5.11 or 5.12 that are closed system Emission Points, there are no TAP compliance reporting requirements for these Emission Points.

iii. **Other TAP Reports**

There are no other TAP compliance reporting requirements. See Additional Conditions 4.g.i. and 4.g.ii.

h. **Fuel**

There are no Fuel compliance reporting requirements.

**U1/U2 Comments**

**1,3 Butadiene**

1. The Flare Thermal Oxidizer (C-FLARE TO) was installed in 2005 to control the combined vent stream from all Emission Unit U1/U2 (Synthetic Rubber Production) and Emission Unit U3 (Liquid Polymer) Emission Points controlled at that time by the existing Flare Control System (C-Flare), whether control was required by an applicable regulation or not. C-FLARE TO is the primary control device for this combined process vent stream, and C-FLARE is used as a back-up control. In addition, for safety reasons, the Flare Control System is allowed to be used in conjunction with the Flare Thermal Oxidizer for control purposes.

2. The hours of gas flow monitor downtime allowance of 1% were calculated by the following equation (8760 hr/yr)(1 yr/12 months)(0.01)= 7.3 hr/month.

**HAP (Non-LDAR)**

3. 40 CFR 63.485 (c), (o), (p), (q), (s), and (v) do not apply to this source as of the effective date of this permit. ASRC operates its reactors in a continuous mode, and is therefore, by the definitions in 40 CFR 63.482, a continuous process. There are consequently no Batch Front-End Process Vents at this source.

4. ASRC complies with the 40 CFR 63 Subpart U provisions for Group 1 Continuous Front-End Process Vents through 40 CFR 63.133(a)(2) (C-FLARE TO) and/or 40 CFR 63.113(a)(1) (C-FLARE), as referenced by 40 CFR 63.485(a).

To comply with the emission reduction requirements of 40 CFR 63.113(a), as referenced by 40 CFR 63.485(a), for Group 1 Continuous Front-End Process Vents, and those Group 2 Continuous Front-End Process Vents with a TRE greater than 1.0 but less than or equal to 4.0 that ASRC has elected, per 40 CFR 63.115(d)(1)(ii) as referenced by 40 CFR 63.485, to consider as Group 1, the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) will be utilized. The primary control device for compliance with the requirements of 40 CFR 63.113(a) will be C-FLARE TO and the backup control will be C-

FLARE. In addition, for safety reasons, the Flare Control System is allowed to be used in conjunction with the Flare Thermal Oxidizer for control purposes. This use of a combination of combustion control devices is allowed per 40 CFR 63.113(a)(2)(i).

The Continuous Front-End Process Vents controlled by the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) can be/are assumed to be Group 1 vents without performance of a group determination pursuant to 40 CFR 63.113(h).

5. ASRC manufactures PBR and SSBR by the solution process and is classified as an existing source, as defined in 40 CFR 63.480, for the purposes of 40 CFR 63 Subpart U.

6. ASRC's back-end process operations comply with the applicable 40 CFR 63 Subpart U residual organic HAP limitation of 40 CFR 63.494(a)(2)(i) through the use of stripping technology, and compliance is demonstrated through sampling. When stripping technology alone does not result in meeting this applicable residual organic HAP limitation, the combination of stripping technology and a control device (one or both of the coal-fired boilers or the Regenerative Thermal Oxidizer RTO-1) is used, as needed, to demonstrate compliance with this limitation.

7. The two coal-fired boiler(s), used as needed, when stripping technology alone does not result in meeting the residual organic HAP limitation specified in 63.494(a)(2)(i), are rated at 212 MM Btu/hr heat input capacity each. In accordance with 63.496(b)(7) and (b)(7)(ii), ASRC is not required to conduct a performance test for the two coal-fired boilers to determine outlet organic HAP emissions. ASRC did perform a test in accordance with 40 CFR 63.496(b) on December 8, 1998. The results of this testing were submitted as part of the Notification Of Compliance Status dated November 13, 2001. Furthermore, the control efficiency of each boiler is assumed to be 98%, which is the nominal control efficiency, pursuant to 63.496(b)(8)(ii).

8. The Regenerative Thermal Oxidizer RTO-1 was performance tested on October 29, 2003 in accordance with the applicable provisions of 40 CFR 63.496. The compliance test report, which was submitted to the District on December 12, 2003, showed the average control efficiency of the Regenerative Thermal Oxidizer RTO-1 to be 99.56% at the average minimum combustion temperature of 1413°F.

9. For the 40 CFR 63 Subpart U MACT Storage Vessels, Continuous Front-End Process Vents, and the Process Wastewater Discharge Group status, the MACT Non-LDAR Notification of Compliance Status was submitted on November 13, 2001, and it contained the information required by 40 CFR 63.506(e)(5). ASRC has no Subpart U MACT process wastewater as defined in 40 CFR 63.482.

10. The Elastomer Product Process Unit (EPPU) at the source (Emission Unit U1/U2) is designed and operated solely to produce products meeting the definition of Polybutadiene Rubber/Styrene-Butadiene Rubber by solution in 40 CFR 63.482. Accordingly, the source has identified its primary elastomer product as Polybutadiene Rubber/Styrene-Butadiene Rubber by solution in its Notification of Compliance Status submittal dated November 13, 2001. Should the source change its primary elastomer product to either another elastomer

product or to a non-elastomer product, the source will be required to provide notification of this change to the District and to U.S. EPA per 40 CFR 63.506(e)(6)(vi), in accordance with the provisions in 40 CFR 63.480(f).

11. The 40 CFR 63 Subpart U MACT Surge Control Vessels are not 40 CFR 63 Subpart U MACT Storage Vessels, per the definitions of storage vessel in 40 CFR 63.482 and surge control vessel in 40 CFR 63.161, as referenced by 40 CFR 63.482. Per 40 CFR 63.170, these Surge Control Vessels do not meet the conditions specified in Table 2 to 40 CFR 63 Subpart H as referenced by 40 CFR 63.480(i)(3). Therefore, there are no 40 CFR 63 Subpart U monitoring, recordkeeping, or reporting requirements. However these vessels meet the definition of storage vessels for the purposes of Regulations 6.13 and 7.12.

12. The Flare Thermal Oxidizer, C-FLARE TO, is only considered an incinerator for the purpose of 40 CFR 63.114(a)(1), based on the 40 CFR 63.111 definition of incinerator. The Regenerative Thermal Oxidizer RTO-1 (C-U1/U2-RTO-1) is only considered an incinerator for the purpose of 40 CFR 63.497. The Flare Thermal Oxidizer and RTO-1 are not considered an incinerator for any other regulatory purposes.

13. The Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE) do not contain a by-pass line that could divert a vent stream away from the C-FLARE TO and/or C-FLARE controls and to the atmosphere. For 40 CFR Part 63 Subpart U MACT Non-LDAR purposes, the Flare Thermal Oxidizer and the Flare Control System combustion control devices are not subject to the requirements of 40 CFR 63.114(d), as referenced by 40 CFR 63.485(a).

**HAP (LDAR)**

14. The Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE) are, for 40 CFR 63 Subpart U MACT LDAR purposes, a closed-vent system and control device as defined in 40 CFR 63 Subpart H (40 CFR 63.161), and are subject to the provisions of 40 CFR 63.172. Both of these closed-vent systems are composed of hard piping as opposed to ductwork. The applicable equipment leak provisions of 40 CFR 63 Subpart U found in 40 CFR 63.502(a) incorporate the requirements of 40 CFR 63 Subpart H, with the exceptions noted in 40 CFR 63.502(b) through (m).

15. Per 40 CFR 63.502(d)(3), reciprocating pumps in light liquid service are exempt from 40 CFR 63.163 and associated recordkeeping and reporting requirements, if recasting the distance piece or reciprocating pump replacement would be nessary to comply with 40 CFR 63.163. Since 40 CFR 63.163 contains the LDAR monitoring requirements for pumps in light liquid service, such reciprocating pumps are exempt from the LDAR requirements.

**VOC**

16. Regulation 6.22 applies only to the loading of volatile organic materials (VOMs), which are any volatile organic compounds (VOCs) having a true vapor pressure of 1.5 psia or greater under actual storage conditions. VOCs which are not VOMs are not subject to this

regulation. There are no standards if each loading facility loads less than 200 gallons per day of VOMs.

17. For Emission Points (No. 1 Line, No. 4 Line, and No. 5 Line), the VOC emission limits of 135 tons per 12 consecutive month period and 12.27 tons per month for each emission point are from Construction Permits 23-88-C, 116-89-C, 354-94-C, and 58-95-C and Banking Permit 168-94-B. The VOC emissions were the controlled potential VOC emissions that the source used in the netting analysis to net out of PSD/Non-attainment NSR for No. 4 Line and No. 5 Line. The No. 1 Line was originally permitted in 1988 with a VOC emission limit of 197 tpy, then in 1989 the source increased the capacity of the finishing line and the new VOC emission limit was 215 tpy. This increase was below the 40 tpy significant level for PSD/Non-attainment NSR. Then, in 1994, the source banked VOC emissions from the No. 1 Line and the emission limit was lowered to 135 tpy.

18. Emission Point (T-13T) is exempt from 40 CFR 60 Subpart Kb per 40 CFR 60.110b(b).

19. In accordance with the requirements in Regulation 6.43, the source submitted the indicators of proper operation for the coal boilers and the Regenerative Thermal Oxidizer RTO-1 in a letter dated June 25, 2003.

**TAP**

20. ASRC submitted on July 1, 2004, as part of its Flare Thermal Oxidizer APCD Construction Permit Application, a One-Time Compliance Demonstration for Emission Unit U1/U2 *uncontrolled* THF (tetrahydrofuran) emissions. This submittal used the minimum height of release of the Flare Thermal Oxidizer stack (S-FLARE TO) to demonstrate compliance with APCD Regulations 5.11/5.12 for THF (tetrahydrofuran) emissions through the use of the ASL. Because compliance had previously been demonstrated on July 25, 2003 for *uncontrolled* THF emissions based on the use of the Flare Control System stack (S-FLARE) height, compliance has also been demonstrated for the case when both stack heights (S-FLARE TO and S-FLARE) are being used simultaneously (*i.e.*, a portion of the vent stream to each stack). There are consequently no monitoring, recordkeeping or reporting requirements for this TAP.

**PM**

21. Emission Point E-U1/U2-BU-1T is vented to a process Filter Cartridge, which discharges through Stack S-U1/U2-DC-1T, which vents indoors inside the enclosure in which BU-1T is located. The potential uncontrolled PM hourly emissions are less than the standard in Additional Condition 1.e.i. Therefore, there are no monitoring, recordkeeping, or reporting requirements for this standard, except for the control device.

**Miscellaneous**

22. Day Tank 1 is not in the U1/U2 Emission Points Table as the tank is currently out of service. It will not be returned to service in its present form, and, if it was returned to service, it would require a Construction permit.

23. The following tanks (D-112, D-113, D-114, D-84, D-85, D-37, D-37M, and D-37½,) are considered part of the Flare Control System (C-FLARE) flare header system. Since they are part of the control, there are no regulations applicable to these tanks. There are consequently no monitoring, recordkeeping, or reporting required for these tanks.

24. Condensers E-24 for Emission Point D-30, E-24M for Emission Point D-30M, and E-24T for Emission Point D-30T are not required controls for compliance with any applicable requirements. Therefore, there are no associated standards, monitoring, recordkeeping, or reporting required for these controls.

25. Definition of "Day" for U1/U2 is the time period from 6 am to 6 pm, except for the Flare Thermal Oxidizer and the Flare Control System, where the time period is from midnight to midnight.

26. The following is a summary of the report periods and due dates for the reports required by this Emission Unit.

| Report Description | Report Period | Report Due Dates |
|---|---|---|
| 1st Semiannual for TV Permit | January 1 through June 30 | August 29 |
| 2nd Semiannual for TV Permit | July 1 through December 31 | March 1[1] |
| 1st Semiannual Non-LDAR | November 16 through May 15 | July 14 |
| 2nd Semiannual Non-LDAR | May 16 through November 15 | January 14 |
| 1st Semiannual for LDAR | January 1 through June 30 | August 29 |
| 2nd Semiannual for LDAR | July 1 through December 31 | March 1[1] |
| 1st Quarter for BD/HAP/VOC[2] | January 1 through March 31 | April 30 |
| 2nd Quarter for BD/HAP/VOC[2] | April 1 through June 30 | July 30 |
| 3rd Quarter for BD/HAP/VOC[2] | July 1 through September 30 | October 30 |
| 4th Quarter for BD/HAP/VOC[2] | October 1 through December 31 | January 30 |

Notes:

[1] The date for leap years is February 29.

[2] Includes the 1,3-Butadiene Emissions Quarterly Reports required by Construction Permit 112-04-C, dated August 31, 2004; the HAP Emissions Quarterly Reports required by Construction Permits 321-03-C, dated September 30, 2003; 116-04-C, dated July 31, 2004; and 112-04-C, dated August 31, 2004; and the VOC Combustion By-Pass Activity Quarterly Reports required by Construction Permits 354-94-C, dated June 1, 1994, and 58-95-C, dated March 10, 1995.

**Emission Unit U3:** Liquid Polymer Production

**U3 Emission Unit Description:** Manufacturing of butadiene-acrylic acid-acrylonitrile terpolymer

**U3 Applicable Regulations**

| Federally Enforceable Regulations | | |
|---|---|---|
| **Regulation** | **Subject** | **Applicable Sections** |
| 1.05 | Compliance with Emission Standards and Maintenance Requirements | 1; and 3 through 5 |
| 6.13 | Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds | 1 through 5 |
| 6.24 | Standard of Performance for Existing Sources Using Organic Materials | 1 through 5 |
| 7.12 | Standard of Performance for New Storage Vessels for Volatile Organic Compounds | 1 through 5 |
| 7.22 | Standard of Performance for New Volatile Organic Materials Loading Facilities | 1 through 4 |
| 7.25 | Standard of Performance for New Sources Using Volatile Organic Compounds | 1 through 5 |
| 40 CFR 63 Subpart A | General Provisions | 63.1 through 63.15 |
| 40 CFR 63 Subpart FFFF | National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing | 63.2430 through 63.2550 |

| District Only Enforceable Regulations | | |
|---|---|---|
| **Regulation** | **Subject** | **Applicable Sections** |
| 1.18 | Rule Effectiveness | 1 through 3 |
| 5.11 | Standards of Performance for Existing Processes or Process Equipment Emitting Toxic Air Pollutants | 1 through 6 |
| 5.12 | Standards of Performance for New or Modified Processes or Process Equipment Emitting Toxic Air Pollutants | 1 through 5 |
| 5.14 | Hazardous Air Pollutants and Source Categories | 1 and 2 |

| U3 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U3"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| General Tank Farm Truck Loading/ Unloading | General Tank Farm Truck Loading/Unloading Early 1990's (Bottom Load) | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.22 | Closed system[1] | | |
| | | 7.25 | Closed system[1] | | |
| Truck Loading/ Unloading | Truck Loading/Unloading 1977 (Bottom Load) | 5.11 | TAL | None | F (Fugitive) |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| | | 7.22 | See AC 1.c.iii.2)b) | | |
| Railcar Loading/ Unloading | Railcar Loading/Unloading 1983 (Bottom Load) | 5.11 | Closed system[1] | N/A | N/A |
| | | 7.22 | Closed system[1] | | |
| | | 7.25 | Closed system[1] | | |
| T-5 | Storage Tank 30,000 gal 1961 | 5.11 | RACT | Two parallel carbon canisters (C-U3-T-5N and C-U3-T-5S) | S-U3-T-5N and S-U3-T-5S |
| | | 6.13 | Submerged Fill; See AC 1.c.i. | | |
| T-6L[3] | Weigh Tank 400 gals 1977 | 5.11 | Closed system[3] | N/A | N/A |
| | | 6.24 | Closed system[3] | | |
| D-49LA[1] | Weigh Scale 1,040 gals 1977 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| D-49LB[1] | Weigh Scale 1,040 gal 1990 | 5.12 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| DR-1[1] | Reactor/Dryer #1 with Knock-out Bottle DK-1 3,750 gals 1977 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| R-2[1] | Reactor/Dryer #2 with Knock-out Bottle DK-2 3,750 gals 1977 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| R-3[1] | Reactor/Dryer #3 with Knock-out Bottle DK-3 3,750 gals 1977 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| R-4[1] | Reactor/Dryer #4 with Knock-out Bottle DK-4 3,750 gals 1977 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| R-5[1] | Reactor/Dryer #5 with Knock-out Bottle DK-5 3,750 gals 1977 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| R-6[1] | Reactor/Dryer #6 with Knock-out Bottle DK-6 3,750 gals 1978 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |
| DR-2[1] | Dryer #2 3,750 gals 1983 | 5.11 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |

| U3 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U3"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| DR-3[1] | Dryer #3<br>3,750 gals 1983 | 5.11 | Closed system[1] | N/A | N/A |
| | | 7.25 | Closed system[1] | | |
| AA-101 | Storage Tank<br>5,600 gals 1986 | 5.11 | TAL | None | S-U3-AA-101 |
| | | 7.12 | Submerged Fill; See AC 1.c.i. | | |
| AA-102 | Storage Tank<br>5,600 gals 1986 | 5.11 | TAL | None | S-U3-AA-102 |
| | | 7.12 | Submerged Fill; See AC 1.c.i. | | |
| AA-103 | Storage Tank<br>5,600 gals 1986 | 5.11 | TAL | None | S-U3-AA-103 |
| | | 7.12 | Submerged Fill; See AC 1.c.i. | | |
| T-71 | Storage Tank<br>15,275 gals 1994 | 7.12 | Submerged Fill; See AC 1.c.i. | None | S-U3-T-71 |
| DDM-2[1] | Weigh Tank<br>108 gal 1977 | 6.24 | Closed system[1] | N/A | N/A |
| DDM-4[1] | Weigh Tank<br>108 gal 1977 | 6.24 | Closed system[1] | N/A | N/A |
| DDM-5[1] | Weigh Tank<br>108 gal 1977 | 6.24 | Closed system[1] | N/A | N/A |
| DDM-6[1] | Weigh Tank<br>108 gal 1977 | 6.24 | Closed system[1] | N/A | N/A |
| [T-3(LP), T-2(LP), C-1(LP), T-1(LP)][2] | LP Monomer Removal System consisting of tank (3,750 gals); accumulator; column; and a vaporizer<br>1997 | 5.12 | BACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| D-3[2] | Receiver with process condenser C-7L<br>317 gals 1977 | 5.11 | RACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| D-53L | Charge Tank<br>420 gals 1977 | 5.11 | TAL | None | S-U3-D-53L |
| | | 6.24 | 8 lb/hr and 40 lb/day, unless 85% reduction | | |
| T-1L[2] | Decant Tank<br>10,350 gals 1982 | 5.11 | RACT | Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) | S-FLARE TO and/or S-FLARE |
| | | 7.25 | BACT | | |
| D-6[1] | Vacuum Pump Knock-out Tank<br>829 gals 1977 | 5.11 | Closed system[1] | N/A | N/A |
| | | 6.24 | Closed system[1] | | |

Notes:

1. These Emission Points do not have a process vent that vents directly either to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) or to the atmosphere. These Emission Points vent indirectly to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) by venting to another Emission Point which ultimately vents to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) . Also, these Emission Points may have a pressure relief valve that vents to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE) for safety purposes.
2. These Emission Points are process vents that vent directly to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE).
3. This Emission Point does not have a vent that vents directly to the atmosphere. This Emission Point (T-6L) vents back to associated Emission Point (T-5).

## U3 Additional Conditions

1. **Standards** (Regulation 2.16, section 4.1.1)

   a. **1,3-Butadiene**

   For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), and T-1(LP)] and Emission Points (D-3 and T-1L), when any are being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE),

   i. The Flare Thermal Oxidizer (C-FLARE TO) shall be utilized as the primary control device, with the existing Flare Control System (C-FLARE) maintained as a safety device and back-up control for C-FLARE TO. (May 2004 Enforceable Board Agreement) (Construction Permit 112-04-C, dated August 31, 2004)

   ii. The Flare Thermal Oxidizer shall have the capability to destroy the 1,3-butadiene that cannot be re-introduced into the manufacturing process. (May 2004 Enforceable Board Agreement)(Construction Permit 112-04-C, dated August 31, 2004)

   iii. The Flare Thermal Oxidizer shall have a minimum destruction efficiency of 99.5%. (May 2004 Enforceable Board Agreement)(Construction Permit 112-04-C, dated August 31, 2004)

   iv. The owner or operator shall design and operate the Flare Thermal Oxidizer to have a minimum of 0.50 second residence time. (Regulation 2.03, section 2.1) (Construction Permit 112-04-C, dated August 31, 2004)

   v. The Flare Thermal Oxidizer (C-FLARE TO) shall be used to combust the process vent stream up to the maximum design gas flow for the Flare Thermal Oxidizer (C-FLARE TO), and any excess of the maximum design gas flow shall be diverted to the Flare Control System (C-FLARE). The maximum design gas flow to still achieve 99.5% destruction efficiency and 0.5 second residence time will be established during the performance test. (Regulation 2.03, section 2.1)(Construction Permit 112-04-C, dated August 31, 2004)

   vi. The owner or operator shall be allowed to divert any or all of the process vent stream from the Flare Thermal Oxidizer to the Flare Control System for a maximum of 876 hours per 12 consecutive months. (Regulation 2.03, section 2.1) (Construction Permit 112-04-C, dated August 31, 2004)

   b. **HAP**

For affected Emission Points, by no later than November 10, 2006, the owner or operator shall comply with the applicable standards (emission limits, operating limits, and work practice standards) as specified in 40 CFR 63 Subpart FFFF.

c. **VOC**

i. For Storage Vessels (T-5, AA-101, AA-102, AA-103, and T-71), each of which has a storage capacity greater than 250 gallons but less than or equal to 40,000 gallons, if the true vapor pressure of the volatile organic compounds, as stored, is equal to or greater than 1.5 psia, as a minimum the storage vessel shall be equipped with a permanent submerged fill pipe or equivalent. True vapor pressure "as stored" shall be determined on an instantaneous basis under conditions representing expected worst case conditions. These storage vessels are all equipped with submerged fill. (Regulations 6.13 and 7.12, sections 3.3) (See Comments 2 and 3)

ii. For Emission Points (Truck Loading/Unloading (when unloading), T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, D-3, D-53L, and D-6), the owner or operator shall limit VOC emissions from each emission point to less than or equal to 40 lbs/day and 8 lbs/hr for Class II solvents, unless VOC emissions are reduced by at least 85% by weight. (Regulation 6.24, section 3.2) (See Comment 4)

1) For Emission Point (D-3), this emission point is controlled by the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), each of which the District has determined meets the 85% by weight reduction requirement of Regulation 6.24. (See Additional Condition 1.c.v. for the Flare Thermal Oxidizer and for the Flare Control System VOC requirements.)

2) For Emission Points (Truck Loading/Unloading (when unloading) and D-53L), see Comment 5.

3) For Emission Points (T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, and D-6), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no requirements for Regulation 6.24.

iii. For Emission Points (General Tank Farm Truck Loading/Unloading (when loading), Truck Loading/Unloading (when loading), and Railcar Loading/Unloading (when loading)), (See Comment 6)

1) The owner or operator of any loading facility from which more than 200 gallons but less than 20,000 gallons of "volatile organic materials" are loaded in any one day shall not load any volatile organic materials into any tank, truck, trailer, or railroad car from any loading facility unless such loading is accomplished by submerged

fill, bottom loading, or equivalent methods approved by the District. Pneumatic, hydraulic, or other mechanical means shall be provided to prevent liquid organic compounds drainage from the loading device when it is removed from the hatch, or to accomplish complete drainage before such removal. "Volatile organic material" means any volatile organic compound which has a true vapor pressure of 78 mm Hg (1.5 psia) or greater under actual storage conditions. Each Emission Point, when loading, is submerged fill/bottom loaded. (Regulation 7.22, section 3.1)

2) The owner or operator of any loading facility from which 20,000 gallons or more of "volatile organic materials" are loaded in any one day shall not load any volatile organic materials into any tank, truck, trailer, or railroad car from any loading facility unless such loading facility is equipped with a device which reduces the emissions of all hydrocarbon vapors and gases by at least 90% by weight, and which is properly installed, in good working order, and in operation. Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor recovery system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. (Regulation 7.22, section 3.2)

a) For Emission Points (General Tank Farm Truck Loading/Unloading (when loading) and Railcar Loading/Unloading (when loading)), each of which is a closed system, the District has determined each meets the minimum 90% emission reduction by weight requirement.

b) For Emission Point (Truck Loading/Unloading (when loading)), which has no control, this Emission Point shall load only "non-volatile organic materials".

iv. For Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, DR-3, and T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)], the owner or operator shall utilize VOC BACT. (Regulation 7.25, section 4)

1) For Emission Point (T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)], the owner or operator shall vent the VOC emissions to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), each of which the District has determined to be VOC BACT for the purposes of Regulation 7.25. (See Additional Condition 1.c.v. for the Flare

Thermal Oxidizer and for the Flare Control System VOC requirements.)

2) For Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, and DR-3), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no requirements for Regulation 7.25.

v. For the Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE), the owner or operator shall comply with the following requirements when VOC emissions from Emission Points (D-3 and T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] are being operated and are venting to either control device. (See Additional Condition 1.a.)

1) The Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) shall be operated at all times when VOC emissions are being vented to it.

2) For the Flare Control System, when VOC emissions are being vented to it;

a) The flare shall be operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

b) The flare shall be operated with a flame present at all times.

d. **TAP**

The owner or operator shall not allow or cause the TAP emissions to exceed the adjusted significant level (ASL) value, unless modeling or a RACT/BACT analysis has been submitted and approved by the District. This additional condition applies to all TAPs emitted from emission points, except TAP HAPs emitted from emission points that are subject to the MACT standard codified at 40 CFR Part 63 Subpart FFFF when it becomes effective on November 10, 2006, as well as to all non-organic TAP HAPs emitted from emission points subject to this MACT standard. (Regulation 5.11 and 5.12, section 1)

i. For Emission Point (T-5), the District has determined that the two parallel carbon canisters meet the RACT requirements in Regulation 5.11. (See Comment 7)

ii. For Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L), all of which are vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-

FLARE), each of the Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE) has been determined to meet the RACT/BACT requirements of Regulations 5.11 and 5.12.

iii. For the Emission Points (Truck Loading/Unloading, AA-101, AA-102, AA-103, and D-53L), which each emits acrylic acid, the owner or operator shall not allow or cause the acrylic acid TAP emissions to exceed the plant-wide limit of 11.18 lbs/hr on an 8-hour average basis, as demonstrated in the acrylic acid modeling submitted August 31, 2000, and supplemented on March 2, 2004, and approved by the District.

iv. For Emission Points (General Tank Farm Truck Loading/Unloading, Railcar Loading/Unloading, T-6L, D-49LA, D-49LB, DR-1, R-2, R-3, R-4, R-5, R-6, DR-2, DR-3, and D-6), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no requirements for Regulations 5.11 and 5.12.

2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

a. **1,3-Butadiene**

For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L), when any are being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE),

i. The combustion temperature of the Flare Thermal Oxidizer, C-FLARE TO, shall be monitored. The combustion temperature monitoring device shall be equipped with a continuous recorder. (Construction Permit 112-04-C, dated August 31, 2004)

ii. The owner or operator shall establish, through the required performance testing, a minimum combustion temperature that assures a minimum 99.5% emission destruction efficiency for C-FLARE TO. (Construction Permit 112-04-C, dated August 31, 2004)

iii. The owner or operator shall not exceed the maximum gas flow (process vent stream plus the combustion air) at a rate to be determined during the stack test. The owner or operator shall continuously monitor the gas flow (process vent stream plus the combustion air) in order to ensure compliance with the 0.50 second residence time. The owner or operator shall be allowed a maximum of 7.3 hours per month for gas flow monitor downtime. (Construction Permit 112-04-C, dated August 31, 2004)(See Comment 1)

iv. The owner or operator shall install, calibrate, and maintain a redundant monitoring instrumentation system for the Flare Thermal Oxidizer that will operate in the event of a malfunction of the primary monitoring

instrumentation system, to include monitoring of the combustion temperature and gas flow rate. (Construction Permit 112-04-C, dated August 31, 2004)

v. The owner or operator shall maintain the spare parts recommended by the manufacturer of the Flare Thermal Oxidizer (C-FLARE TO). (Construction Permit 112-04-C, dated August 31, 2004)

b. **HAP**

For affected Emission Points, by no later than November 10, 2006, the owner or operator shall comply with the applicable compliance monitoring requirements as specified in 40 CFR 63 Subpart FFFF.

c. **VOC**

i. For Storage Vessels (T-5, AA-101, AA-102, AA-103, and T-71), there are no VOC compliance monitoring requirements for these Emission Points. (See Comments 2 and 3)

ii. For Emission Points (Truck Loading/Unloading (when unloading), T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, D-3, D-53L, and D-6),

1) For Emission Point (D-3), see Additional Condition 3.c.ii.1).

2) For Emission Points (Truck Loading/Unloading (when unloading) and D-53L), there are no VOC compliance monitoring requirements for these Emission Points. (See Comment 5)

3) For Emission Points (T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, and D-6), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no compliance monitoring requirements for Regulation 6.24.

iii. For Emission Points (General Tank Farm Truck Loading/Unloading (when loading), Truck Loading/Unloading (when loading), and Railcar Loading/Unloading (when loading)),

1) When loading more than 200 gallons but less than 20,000 gallons of volatile organic material (VOM) in any one day, there are no VOC compliance monitoring requirements for these Emission Points because all of the Emission Points are submerged fill/bottom loaded.

2) When loading 20,000 gallons or more of volatile organic materials (VOM) in any one day,

a) For Emission Points (General Tank Farm Truck Loading/Unloading (when loading) and Railcar Loading/Unloading (when loading)), each of which is a closed system, there are no VOC compliance monitoring requirements because these Emission Points do not have a vent to the atmosphere.

b) For Emission Point (Truck Loading/Unloading (when loading)), see Additional Condition 3.c.iii.2)b).

iv. For Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, DR-3, and T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)],

1) For Emission Point (T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)], see Additional Condition 3.c.iv.1).

2) For Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, and DR-3), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no compliance monitoring requirements for Regulation 7.25.

v. For the Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE), the owner or operator shall comply with the following requirements when VOC emissions from Emission Points (D-3 and T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] are being operated and are venting to either control device. (See Additional Condition 2.a.)

1) For the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE), when VOC emissions are being vented to it, see Additional Condition 2.a.

2) For the Flare Control System, when VOC emissions are being vented to it;

a) The owner or operator shall continuously monitor the flare pilot flame.

b) The owner or operator shall conduct a monthly visible emissions test (EPA Reference Method 22 in Appendix A of Part 60).

vi. For U3 VOC Emission Points, the owner or operator shall calculate production emissions by using the following formula: (Regulation 1.05, section 4)

U3 VOC Daily Emissions = VOC Charge Tank Emissions + [(lb VOC Monomer Charged - lb VOC Monomer Converted to Product - lb VOC Recovered) x (1 - Control Efficiency)]

Where:

VOC Charge Tank Emissions = 0.397 lbVOC/batch, where 1 batch = 7,100 lbs
lb VOC Monomer Charged - lb VOC Monomer Converted to Product = 6,815.5 lb VOC/batch, where 1 batch = 7,100 lbs
lb VOC Recovered = Average daily lbs VOC recovered, based on a 30 consecutive charging day average daily lbs VOC recovered
Control Efficiency = Control Efficiency of the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE)

d. **TAP**

i. For Emission Point (T-5), for the two parallel carbon canisters (C-U3-T-5N and C-U3-T-5S), that are required to meet TAP RACT, the owner or operator shall perform weekly visual inspections of the integrity of the carbon canisters. (See Comment 7)

ii. For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L), see Additional Condition 3.d.ii.

iii. For Emission Points (Truck Loading/Unloading, AA-101, AA-102, AA-103, and D-53L), which each emits acrylic acid, see Additional Condition 3.d.iii.

iv. For Emission Points (General Tank Farm Truck Loading/Unloading, Railcar Loading/Unloading, T-6L, D-49LA, D-49LB, DR-1, R-2, R-3, R-4, R-5, R-6, DR-2, DR-3, and D-6), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no compliance monitoring requirements for Regulations 5.11 and 5.12.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **1,3-Butadiene**

For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L), when any are being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE),

i. For the time periods when the Flare Thermal Oxidizer (C-FLARE TO) is operating and processing any process vent stream, the owner or operator shall maintain continuous combustion temperature records of the Flare Thermal Oxidizer (C-FLARE TO). (Construction Permit 112-04-C, dated August 31, 2004)

ii. The owner or operator shall maintain a record of the date, start time, and stop time for each diversion of the process vent stream, to the Flare Control System (C-FLARE) from the Flare Thermal Oxidizer (C-FLARE TO) that occurred during each month. If there are no diversions during the month, the owner or operator shall record that there were no diversions in the month.(Construction Permit 112-04-C, dated August 31, 2004)

iii. For the time periods when the Flare Thermal Oxidizer (C-FLARE TO) is operating and processing any process vent stream, the owner or operator shall keep a continuous record of the gas flow (process vent stream plus combustion air) with the exception of any monitor downtime. (Construction Permit 112-04-C, dated August 31, 2004) (See Comment 1)

iv. The owner or operator shall keep a monthly record of the hours that any or all of the process vent stream flow is diverted from the Flare Thermal Oxidizer (C-FLARE TO) to the Flare Control System (C-FLARE). The owner or operator shall monthly calculate the 12 consecutive month hours of diversion. (Construction Permit 112-04-C, dated August 31, 2004)

v. The owner or operator shall maintain records regarding the status of spare parts recommended by the manufacturer of the Flare Thermal Oxidizer (C-FLARE TO). (Construction Permit 112-04-C, dated August 31, 2004)

b. **HAP**

i. The owner or operator shall monthly calculate the total plant-wide emissions of each HAP, starting in January 2004. (Construction Permits 321-03-C, dated September 30, 2003; 116-04-C, dated July 31, 2004; and 112-04-C, dated August 31, 2004.

ii. For affected Emission Points, by no later than November 10, 2006, the owner or operator shall comply with the applicable compliance recordkeeping requirements as specified in 40 CFR 63 Subpart FFFF.

c. **VOC**

i. For Storage Vessels (T-5, AA-101, AA-102, AA-103, and T-71), there are no VOC compliance recordkeeping requirements for these Emission Points. (See Comments 2 and 3)

ii. For Emission Points (Truck Loading/Unloading (when unloading), T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, D-3, D-53L, and D-6),

1) For Emission Point (D-3), the owner or operator shall keep a record of the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) are not in operation and venting to the atmosphere of this Emission Point occurs such that the VOC emissions exceed the Regulation 6.24 hourly and/or daily limits (*i.e.*, times VOC emissions occur in excess of the Regulation 6.24 limit and are not controlled by the Flare Thermal Oxidizer and/or the Flare Control System).

2) For Emission Points (Truck Loading/Unloading (when unloading) and D-53L), there are no VOC compliance monitoring requirements for these Emission Points. (See Comment 5)

3) For Emission Points (T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, and D-6), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no VOC compliance recordkeeping requirements for Regulation 6.24.

iii. For Emission Points (General Tank Farm Truck Loading/Unloading (when loading), Truck Loading/Unloading (when loading), and Railcar Loading/Unloading (when loading)),

1) When loading more than 200 gallons but less than 20,000 gallons of volatile organic material (VOM) in any one day, there are no VOC compliance recordkeeping requirements for these Emission Points because all of the Emission Points are submerged fill/bottom loaded.

2) When loading 20,000 gallons or more of volatile organic materials (VOM) in any one day,

a) For Emission Points (General Tank Farm Truck Loading/Unloading (when loading) and Railcar Loading/Unloading (when loading)), each of which is a closed system, there are no VOC compliance recordkeeping requirements because these Emission Points do not have a vent to the atmosphere.

b) For Emission Point (Truck Loading/Unloading (when loading)), the owner or operator shall maintain a list of the materials that are loaded and the corresponding true vapor pressure under actual storage conditions. If a material is changed to a material not on the list, then a record shall be

made of the new material and its true vapor pressure under actual storage conditions in order to demonstrate compliance with Additional Condition 1.c.iii.2)b).

iv. For Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, DR-3, and T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)],

1) For Emission Point (T-1L) and the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)], the owner or operator shall keep a record of the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) are not in operation and venting to the atmosphere of any of these Emission Points occurs (*i.e.*, times emissions occur and are not controlled by the Flare Thermal Oxidizer and/or the Flare Control System).

2) For Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, and DR-3), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no VOC compliance recordkeeping requirements for Regulation 7.25.

v. For the Flare Thermal Oxidizer (C-FLARE TO) and the Flare Control System (C-FLARE), the owner or operator shall comply with the following requirements when VOC emissions from Emission Points (D-3 and T-1L) and Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] are being operated and are venting to either control device. (See Additional Condition 3.a.)

1) For the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE), when VOC emissions are being vented to it, see Additional Condition 3.a.

2) For the Flare Control System, when VOC emissions are being vented to it;

a) The owner or operator shall maintain a record of the date and time when the flare pilot flame went out, and the date and time that the flare pilot flame was reignited, whenever U3 process venting to the Flare Control System (C-FLARE) occurs during this outage time.

b) The owner or operator shall keep a record of each visible emission test (Method 22).

c) The owner or operator shall obtain a sample of the gas going to the Flare Control System within 24 hours and the flow of gas going to the Flare Control System if the flame is extinguished for any reason and U3 process venting to the Flare Control System (C-FLARE) occurs during this outage time.

vi. For U3 VOC Emission Points, the owner or operator shall maintain the following records and monthly calculate daily VOC emissions by the formula contained in Additional Condition 2.c.vi. If U3 batch charging did not occur on a given day, a negative declaration may be entered into the appropriate records. (Regulation 1.05, section 4)

1) Daily pounds of production

2) Average daily pounds of VOC recovered

3) Daily applicable control efficiency (Flare Thermal Oxidizer and/or Flare Control System)

d. **TAP**

i. For Emission Point (T-5), for the two parallel carbon canisters (C-U3-T-5N and C-U3-T-5S), that are required to meet RACT, the owner or operator shall keep records of each weekly visual inspection of the integrity of the carbon canisters. (See Comment 7)

ii. For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L), the owner or operator shall keep a record of the times the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) are not in operation and venting of any of these Emission Points occurs (*i.e.*, times emissions occur and are not controlled by the Flare Thermal Oxidizer and/or the Flare Control System).

iii. For Emission Points (Truck Loading/Unloading, AA-101, AA-102, AA-103, and D-53L), which each emits acrylic acid, the owner or operator shall keep records showing that any proposed changes in the modeling parameters (e.g., stack height, temperature, or exit velocity) would not allow an exceedance of the TAL, and make these records available to the District upon request.

iv. For Emission Points (General Tank Farm Truck Loading/Unloading, Railcar Loading/Unloading, T-6L, D-49LA, D-49LB, DR-1, R-2, R-3, R-4, R-5, R-6, DR-2, DR-3, and D-6), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no compliance recordkeeping requirements for Regulations 5.11 and 5.12.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the 1,3-Butadiene Emissions Quarterly Reports, HAP Emissions Quarterly Reports, Title V Semiannual Reports, and all other required reports. The required 1,3-Butadiene Emissions Quarterly Reports and the HAP Emissions Quarterly Reports are contained in a single quarterly report entitled BD/HAP/VOC Quarterly Report. (The VOC in this report refers to the VOC Combustion By-pass Activity Quarterly Report specific only to the U1/U2 Emission Unit.) Duplicative reporting is not required. For example, information required to be submitted in the MACT Compliance Reports is not required to also be submitted in the Title V Semiannual Reports. If no deviations occur in a reporting period, the owner or operator shall report a negative declaration for the following. (See Comment 10)

a. **1,3-Butadiene**

i. **1,3-Butadiene Emissions Quarterly Reports**

For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L) when any are being vented to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE), the owner or operator shall report the following information within 30 days of the end of the calendar quarter. This 1,3-Butadiene Emissions Quarterly Reporting shall be included in the BD/HAP/VOC Quarterly Report, which includes, in addition to this 1,3-Butadiene Emissions Quarterly Reporting, the HAP Emissions Quarterly Reports required by Additional Condition 4.b.i. (The VOC in the BD/HAP/VOC Quarterly Report refers to the VOC Combustion By-pass Activity Quarterly Report specific only to the U1/U2 Emission Unit.) See Additional Condition 4.b.i. and Comment 10.

1) The plant-wide 1,3-butadiene emissions for each month in the quarter. This reporting shall contain the date, start time, and stop time for each diversion of the process vent stream flow from the Flare Thermal Oxidizer (C-FLARE TO) to the Flare Control System (C-FLARE). This reporting shall also contain the number of hours the process vent stream flow was diverted from the Flare Thermal Oxidizer to the Flare Control System for each month and 12 consecutive month period during the reporting period. (Construction Permit 112-04-C, dated August 31, 2004)

2) The date, start time, and stop time of any by-passes to the atmosphere that occurred during the month or a negative declaration if there were no by-passes to the atmosphere. (Construction Permit 112-04-C, dated August 31, 2004)

3) All times the gas flow (process vent stream plus the combustion air) exceeded the maximum gas flow during the month or a negative declaration if there were no exceedances. (Construction Permit 112-04-C, dated August 31, 2004)

ii. **Title V Semiannual Reports (1,3-Butadiene)**

Upon start-up of the Flare Thermal Oxidizer and its use to process the vent stream currently controlled by the Flare Control System, the owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to included in the Title V Semiannual Reports is addressed in Additional Conditions 4.b.ii., 4.c.ii., and 4.d.ii. (Construction Permit 112-04-C, dated August 31, 2004) (See Comment 10)

For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L) when any are being operated and are venting to the Flare Thermal Oxidizer (C-FLARE TO) and/or Flare Control System (C-FLARE),

1) Emission Unit ID number, Emission Point ID number, and Control Device ID.

2) The beginning and ending date of the reporting period.

3) Daily average values of the Flare Thermal Oxidizer (C-FLARE TO) combustion temperature for all operating days, when VOC emissions are vented to the Flare Thermal Oxidizer (C-FLARE TO), when the daily average values recorded were below the minimum combustion temperature established first by the Flare Thermal Oxidizer Construction Permit and then by the required performance testing.

4) Daily average values of the gas flow (process vent stream plus the combustion air) for all operating days, when VOC emissions are vented to the Flare Thermal Oxidizer (C-FLARE TO), when the daily average values recorded were above the maximum gas flow.

5) Duration of periods when VOC emissions are vented to the Flare Thermal Oxidizer (C-FLARE TO) and monitoring data are not collected for each excursion caused by insufficient monitoring data. The 40 CFR Part 63 Subpart U definitions of excursion and insufficient monitoring data in 40 CFR 63.505(g), as well as the allowable excused excursions per 40 CFR 63.505(i), will be used for reporting purposes under this Additional Condition. (See Emission Unit U1/U2 Additional Conditions 4.b.iii.2)a) and c))

6) Description of any corrective action taken for each identified exceedance.

b. **HAP**

i. **HAP Emissions Quarterly Reports**

The owner or operator shall report quarterly the total plant-wide emissions of each HAP for each month in the quarter, starting with the first calendar quarter of 2004. This report is due no later than 30 days following the end of the calendar quarter. This HAP emissions quarterly reporting shall be included in the BD/HAP/VOC Quarterly Report, which includes, in addition to this HAP emissions quarterly reporting, the 1,3-Butadiene Emissions Quarterly Reports required by Additional Condition 4.a.i. (The VOC in the BD/HAP/VOC Quarterly Report refers to the VOC Combustion By-pass Activity Quarterly Report specific only to the U1/U2 Emission Unit.) (Construction Permits 321-03-C, dated September 30, 2003; 116-04-C, dated July 31, 2004; and 112-04-C, dated August 31, 2004) (See Comment 10)

ii. **Title V Semiannual Reports (HAP)**

There are no HAP Title V Semiannual Reporting requirements. Information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.c.ii., and 4.d.ii.

iii. **Other HAP Reports**

For affected Emission Points, by no later than November 10, 2006, the owner or operator shall comply with the applicable compliance reporting requirements as specified in 40 CFR 63 Subpart FFFF.

c. **VOC**

i. **VOC Emissions Quarterly Reports**

There are no VOC Emissions Quarterly Reporting requirements.

ii. **Title V Semiannual Reports (VOC)**

The owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.b.ii., and 4.d.ii. (See Comment 10)

1) For Storage Vessels (T-5, AA-101, AA-102, AA-103, and T-71), there are no VOC Title V compliance reporting requirements for these Emission Points. (See Comments 2 and 3)

2) For Emission Points (Truck Loading/Unloading (when unloading), T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, D-3, D-53L, and D-6),

a) For Emission Point (D-3), the owner or operator shall report the following.

(A) Emission Unit ID number and Emission Point ID number.
(B) The beginning and ending date of the reporting period.
(C) Identification of each exceedance of the VOC Standard (*i.e.*, the periods of time (date, start time, and stop time) that the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) were not in operation and venting of the Emission Point occurred such that the standard from Regulation 6.24 (hourly and/or daily limits) was exceeded, and the amount of the VOC emissions.
(D) Description of any corrective action taken for each identified exceedance.

b) For Emission Points (Truck Loading/Unloading (when unloading) and D-53L), there are no VOC Title V compliance reporting requirements for these Emission Points. (See Comment 5)

c) For Emission Points (T-6L, D-49LA, DR-1, R-2, R-3, R-4, R-5, R-6, DDM-2, DDM-4, DDM-5, DDM-6, and D-6), there are no VOC Title V compliance reporting requirements for these Emission Points.

3) For Emission Points (General Tank Farm Truck Loading/Unloading (when loading), Truck Loading/Unloading (when loading), and Railcar Loading/Unloading (when loading)), there are no VOC Title V compliance reporting requirements for these Emission Points.

4) For the Emission Point System consisting of [T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, DR-3, and T-1L),

a) For the Emission Point System consisting of [(T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Point (T-1L), the owner or operator shall report the following.

(A) Emission Unit ID number and Emission Point ID number.

(B) The beginning and ending date of the reporting period.

(C) Identification of each exceedance of the VOC Standard (*i.e.*, the periods of time (date, start time, and stop time) that the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) were not in operation and venting of the Emission Point occurred such that the standard from Regulation 7.25 (VOC BACT) was exceeded, and the amount of the VOC emissions.

(D) Description of any corrective action taken for each identified exceedance.

b) For Emission Points (General Tank Farm Truck Loading/Unloading (when unloading), Railcar Loading/Unloading (when unloading), D-49LB, DR-2, and DR-3), there are no VOC Title V compliance reporting requirements for these Emission Points.

d. **TAP**

i. **TAP Emissions Quarterly Reports**

There are no TAP Emissions Quarterly Reporting requirements.

ii. **Title V Semiannual Reports (TAP)**

The owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th, and July 1st through December 31st, of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. Other information to be included in the Title V Semiannual Reports is addressed in Additional Conditions 4.a.ii., 4.b.ii., and 4.c.ii. (See Comment 10)

i. For Emission Point (T-5), for the two parallel carbon canisters (C-U3-T-5N and C-U3-T-5S), that are required to meet RACT, the owner or operator shall report the following:

1) Emission Unit ID number and Emission Point ID number.

2) The beginning and ending date of the reporting period.

3) Identification of each weekly visual inspection of the carbon canisters that resulted in corrective action being taken.

4) Description of any corrective action taken

ii. For the Emission Point System consisting of [(T-3(LP), T-2(LP), C-1(LP), T-1(LP)] and Emission Points (D-3 and T-1L), the owner or operator shall report the following.

1) Emission Unit ID number and Emission Point ID number.

2) The beginning and ending date of the reporting period.

3) Identification of each exceedance of the TAP RACT/BACT requirement (*i.e.*, the periods of time the Flare Thermal Oxidizer (C-FLARE TO) and/or the Flare Control System (C-FLARE) were not in operation and venting of the Emission Point occurred, the standard that was exceeded (TAP RACT/BACT), and the amount of the TAP emissions.

4) Description of any corrective action taken for each identified exceedance.

iii. For Emission Points (Truck Loading/Unloading, AA-101, AA-102, AA-103, and D-53L), which each emits acrylic acid, there are no TAP Title V Semiannual Reporting requirements for these Emission Points.

iv. For Emission Points (General Tank Farm Truck Loading/Unloading, Railcar Loading/Unloading, T-6L, D-49LA, D-49LB, DR-1, R-2, R-3, R-4, R-5, R-6, DR-2, DR-3, and D-6), these Emission Points are closed, or closed pressurized, systems and do not have a vent to the atmosphere. Thus there are no TAP compliance reporting requirements for Regulations 5.11 and 5.12.

**U3 Comments**

**1,3 Butadiene**

1. The hours of gas flow monitor downtime allowance of 1% were calculated by the following equation (8760 hr/yr)(1 yr/12 months)(0.01)= 7.3 hr/month.

**VOC**

2. The two parallel carbon canisters (C-U3-T-5N and C-U3-T-5S) are used to control breathing losses from Storage Vessel T-5. Emission Point (T-5) meets the VOC equipment standard requirements of Regulation 6.13 by submerged fill. Therefore, the carbon canisters are not required in order to demonstrate compliance with Regulation 6.13, and there are no VOC monitoring, recordkeeping, or reporting requirements for this Emission Point. (See Comment 7)

3. Emission Point (T-71) is exempt from 40 CFR 60 Subpart Kb per 40 CFR 60.110b(b).

4. All Class III solvents are considered Class II solvents for these emission points. Class II solvents have the more stringent VOC standard in Regulation 6.24.

5. For Emission Points (Truck Loading/Unloading (when unloading) and D-53L), the source submitted a one-time VOC compliance demonstration on July 25, 2003 that showed the potential VOC emissions (maximum uncontrolled) at each emission point can not exceed the standards of Regulation 6.24. Therefore, there are no VOC monitoring, recordkeeping, or reporting requirements associated with these Emission Points. For the purposes of these compliance demonstrations, any Class II and Class III solvent mixtures were considered to be Class II.

6. Regulation 7.22 applies only to the loading of Volatile Organic Materials (VOM), which are any Volatile Organic Compounds (VOC) having a true vapor pressure of 1.5 psia or greater under actual storage conditions. VOCs which are not VOM are not subject to this regulation. There are no standards if each loading facility loads less than 200 gallons per day of VOMs.

**TAP**

7. Storage Vessel (T-5) has two parallel carbon canisters (C-U3-T-5N and C-U3-T-5S) that are used to control breathing losses. These canisters are only required for TAP compliance.

**Miscellaneous**

8. The following tanks (D-83L and D-82L) are considered part of the Flare Control System (C-FLARE) flare header system. Since they are part of the control system, there are no applicable standards to these tanks. There are consequently no monitoring, recordkeeping, or reporting for these tanks.

9. The definition of “Day” for U3 is the time period from midnight to midnight.

10. The following is a summary of the report periods and due dates for the reports.

| Report Description | Report Period | Report Due Dates |
|---|---|---|
| 1st Semiannual for TV Permit | January 1 through June 30 | August 29 |
| 2nd Semiannual for TV Permit | July 1 through December 31 | March 1[1] |
| 1st Quarter for BD/HAP/VOC[2] | January 1 through March 31 | April 30 |
| 2nd Quarter for BD/HAP/VOC[2] | April 1 through June 30 | July 30 |
| 3rd Quarter for BD/HAP/VOC[2] | July 1 through September 30 | October 30 |
| 4th Quarter for BD/HAP/VOC[2] | October 1 through December 31 | January 30 |

Notes:

[1] The date for leap years is February 29.

[2] Includes the 1,3-Butadiene Emissions Quarterly Reports required by Construction Permit 112-04-C, dated August 31, 2004 and the HAP Emissions Quarterly Reports required by

Construction Permits 321-03-C, dated September 30, 2003; 116-04-C, dated July 31, 2004; and 112-04-C, dated August 31, 2004. (The VOC in the BD/HAP/VOC Quarterly Reports refers to the VOC Combustion By-Pass Activity Quarterly Report specific only to U1/U2 Emission Unit.)

**Emission Unit U4**: Power House

**Emission Unit Description:** Production of process/building steam/heat and co-generation of electricity (Four (4) boilers and associated coal, lime, and ash handling systems)

**U4 Applicable Regulations**

| Federally Enforceable Regulations | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 2.04 | Construction or Modification of Major Sources In or Impacting Upon Non-Attainment Areas (Emission Offset Requirements) | 1 through 10 |
| 2.05 | Prevention of Significant Deterioration of Air Quality | 1 through 20 |
| 6.42 | Reasonably Available Control Technology Requirements for Major Volatile Organic Compound- and Nitrogen Oxides-Emitting Facilities | 1 through 5 |
| 7.06 | Standards of Performance for New Indirect Heat Exchangers | 1 through 8 |
| 7.08 | Standards of Performance for New Process Operations | 1 through 3 |
| 7.22 | Standard of Performance for New Volatile Organic Materials Loading Facilities | 1 through 4 |
| 7.25 | Standard of Performance for New Sources Using Volatile Organic Compounds | 1 through 5 |
| 40 CFR 60 Subpart A | General Provisions | 60.1 through 60.19 |
| 40 CFR 60 Subpart Db | Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units | 60.40b through 60.49b |
| 40 CFR 60 Subpart Dc | Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units | 60.40c through 60.43c; and 60.48c |
| 40 CFR 63 Subpart A | General Provisions | 63.1 through 63.15 |
| 40 CFR 63 Subpart DDDDD | National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters | 63.7480 through 63.7575 |

| District Only Enforceable Regulations | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 5.12 | Standards of Performance for New or Modified Processes or Process Equipment Emitting Toxic Air Pollutants | 1 through 5 |
| 7.02 | Adoption of Federal New Source Performance Standards | 1, 2, 3.1, 3.10, 3.11, 4, 5 |

| U4 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U4"** | **Description** | **Applicable Requirement(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| Truck Fuel Oil Loading/ Unloading | Truck Fuel Oil Loading/Unloading 1990 (Bottom Load) | 7.22 (Loading) | Closed system | N/A | N/A |
| | | 7.25 (Unloading) | Closed system | | |
| Truck Lime Unloading | Truck Lime Unloading 1990 | 5.12 | Closed system | N/A | N/A |
| | | 7.08 | Closed system | | |
| Boiler #1 and Boiler #2 | Boiler #1 and Boiler #2<br><br>Two coal-fired spreader stoker boilers; 212 MM Btu/Hr each 1990 | 2.04 | See AC 1.h. | Dry scrubber (C-U4-SDR) and Fabric Filter (C-U4-BAGHOUSE) | S-U4-BLR1/2 |
| | | 2.05 | See AC 1.a., 1.b., 1.c., 1.e., 1.f., and 1.g. | | |
| | | 7.06 | See AC 1.b., 1.c., and 1.d. | | |
| | | 40 CFR 60 Subpart Db | See AC 1.a., 1.b., 1.c., and 1.d. | | |
| | | 6.42 | 0.50 lb/MM Btu | | |
| Boiler #3 and Boiler #4 | Boiler #3 and Boiler #4<br><br>Two gas-fired boilers; 99 MM Btu/Hr each. #2 Fuel oil is the backup fuel for boiler #4 1990 | 2.04 | See AC 1.h. | None | S-U4-BLR3/4 |
| | | 2.05 | See AC 1.a., 1.b., 1.c., 1.e., 1.f., and 1.g. | | |
| | | 7.06 | See AC 1.b., 1.c., and 1.d. | | |
| | | 40 CFR 60 Subpart Dc | See AC 1.b. and 1.d. | | |
| | | 6.42 | 0.20 lb/MM Btu | | |
| Ash Handling System | Ash Handling System including silo and associated ash collection 1990 | 2.05 | See AC 1.c.viii. | Fabric Filter (C-U4-ASHSILO) | S-U4-ASHSILO |
| | | 5.12 | BACT | | |
| | | 7.08 | 1.278 lb/hr | | |
| | | 7.08 | < 20% | | |
| Ash Load-Out System | Ash Load-Out System 1996 | 5.12 | BACT | Fabric Filter (C-U4-ASHLOAD) | S-U4-ASHLOAD (vents indoors) |
| | | 7.08 | 3.2 lb/hr | | |
| | | 7.08 | < 20% | | |
| Lime Handling System | Lime Handling System including silo and makeup tank 1990 | 2.05 | See AC 1.c.x. | Fabric Filter (C-U4-LIMESILO) | S-U4-LIMESILO |
| | | 5.12 | BACT | | |
| | | 7.08 | 0.3 lbs/hr | | |
| | | 7.08 | < 20% | | |

| U4 Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-U4"** | **Description** | **Applicable Requirement(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| Coal Handling System | Coal Handling System including silo, hoppers, conveyor systems, and crushers 1990 | 2.05 | See AC 1.c.xi. | Fabric Filter (C-U4-COALSILO) | S-U4-COALSILO |
| | | 7.08 | 0.154 lbs/hr | | |
| | | 7.08 | < 20% | | |

## U4 Additional Conditions

1. **Standards** (Regulation 2.16, section 4.1.1)

   a. **$NO_x$**

      i. When Boiler #1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the $NO_x$ emissions from Boiler #1 and Boiler #2 combined to exceed 254.4 pounds per hour based on a 3 hour averaging period. (Regulation 2.05; Regulation 7.06, section 7.7.3 and 7.8; PSD Permit # 312-05-C, dated December 31, 2005)

      ii. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow $NO_x$ emissions from Boiler #1 and Boiler #2 to exceed 0.60 lb/MMBtu of heat input based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005; 40 CFR 60.44b(a)(3)(ii) and 60.44b(i)) (See Comment 1)

      iii. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the $NO_x$ (expressed as $NO_2$) emissions from Boiler #1 and Boiler #2 to exceed 0.50 lb/MMBtu of heat input, based upon a 30-day rolling average. This limit applies at all times, including periods of startup, shutdown, or malfunction. (Regulation 6.42, section 4.3) (See Appendix A, Element 1) (See Comment 1)

      iv. When combusting either natural gas or fuel oil, the owner or operator shall not allow the $NO_x$ emissions from Boiler #3 and Boiler #4 to exceed 29.7 pounds per hour each based on a 3 hour averaging period. (Regulation 2.05; Regulation 7.06, section 7.7.3 and 7.8; PSD Permit # 313-05-C, dated December 31, 2005)

      v. When combusting either natural gas or fuel oil, the owner or operator shall not allow $NO_x$ emissions from Boiler #3 and Boiler #4 to exceed 0.30 lb/MMBtu of heat input based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005)(See Comment 1)

      vi. When combusting either natural gas or fuel oil, the owner or operator shall not allow the $NO_x$ (expressed as $NO_2$) emissions from each of Boiler #3 and Boiler #4 to exceed 0.20 pound per million Btu of heat input based on a 30-day rolling average. Only Boiler #4 may combust No. 2 fuel oil in addition to natural gas. (Regulation 6.42, section 4.3) (See Appendix A, Element 4) (See Comment 1)

   b. **$SO_2$**

      i. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the $SO_2$ emissions from Boiler #1 and Boiler #2 combined to

exceed 141.3 pounds per hour based on a 3 hour averaging period. (Regulation 2.05; Regulation 7.06, section 7.7.2 and 7.8; PSD Permit # 312-05-C, dated December 31, 2005)

ii. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the $SO_2$ emissions from Boiler #1 and Boiler #2 to exceed 0.33 lb/MM Btu heat input capacity based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005)

iii. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow or cause to be discharged into the atmosphere any gases from Boiler #1 and Boiler #2 that contain $SO_2$ in excess of 10 % (0.10) of the potential $SO_2$ emission rate (90 % reduction) and that contain sulfur dioxide in excess of 1.2 lbs/MM Btu. Both the percent reduction requirement and the emission limit are based on a 30-day rolling average. The sulfur dioxide emission limits and percent reduction requirements apply at all times, including periods of startup, shutdown, and malfunction. (40 CFR 60.42b(a), 60.42b(e) and 60.42b(g))

iv. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the $SO_2$ emissions from each of Boiler #1 and Boiler #2 to exceed 1.2 lbs/MM Btu actual heat input based on a 30-day rolling average. (Regulation 7.06, section 5.1.2)

v. When combusting either natural gas or fuel oil, the owner or operator shall not allow the $SO_2$ emissions from Boiler #3 and Boiler #4 to exceed 51.0 pounds per hour each based on a 3 hour averaging period. (Regulation 2.05; Regulation 7.06, section 7.7.2 and 7.8; PSD Permit # 313-05-C, dated December 31, 2005)

vi. When combusting either natural gas or fuel oil, the owner or operator shall not allow the $SO_2$ emissions from Boiler #3 and Boiler #4 to exceed 0.515 lb/MM Btu heat input each based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005)

vii. When combusting fuel oil in Boiler #4, the sulfur content of the fuel oil shall not exceed 0.50% by weight. Compliance with the fuel oil sulfur limits are determined based on a certification from the fuel supplier. The fuel oil sulfur limit applies at all times, including periods of startup, shutdown and malfunction. (40 CFR 60.42c(d), 60.42c(g), 60.42c(h), 60.42c(h)(1) and 60.42c(i))

viii. When combusting either natural gas or fuel oil, the owner or operator shall not allow the $SO_2$ emissions from each of Boiler #3 and Boiler #4 to exceed 0.8 lb/MM Btu actual heat input based on a 30-day rolling average. (Regulation 7.06, section 5.1.2)

c. **PM**

i. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the PM emissions from Boiler #1 and Boiler #2 combined to exceed 12.72 pounds per hour. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005)

ii. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the PM emissions from Boiler #1 and Boiler #2 to exceed 0.030 lb/MM Btu heat input based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005)

iii. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not cause to be discharged into the atmosphere PM emissions from Boiler #1 and Boiler #2 that exceed 0.051 lb/MM Btu heat input. This standard applies at all times, except during periods of start-up, shutdown or malfunction. (40 CFR 60.43b(a)(1)(i) and 60.43b(g))

iv. When Boiler # 1 and/or Boiler #2 are combusting coal, the owner or operator shall not cause to be discharged into the atmosphere PM emissions from Boiler #1 and Boiler #2 that exceed 0.10 lb/MM Btu actual heat input. (Regulation 7.06, section 4.1.2)

v. When combusting either natural gas or fuel oil, the owner or operator shall not allow the PM emissions from Boiler #3 and Boiler #4 to exceed 1.43 lbs/hr each. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005)

vi. When combusting either natural gas or fuel oil, the owner or operator shall not allow the PM emissions from Boiler #3 and Boiler #4 to exceed 0.014 lb/MMBtu heat input based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005)

vii. When combusting either natural gas or fuel oil, the owner or operator shall not cause to be discharged into the atmosphere PM emissions from Boiler #3 and Boiler #4 that exceed 0.10 lb/MM Btu actual heat input. (Regulation 7.06, section 4.1.2)

viii. For Emission Point (Ash Handling System), when operating, the owner or operator shall not allow PM emissions to exceed 1.278 lb/hr and 1.4 tons per calendar year from the Ash Handling System. (Regulation 7.08, section 3.1.2; Regulation 2.05; PSD Permits # 195-90-C, dated August 27, 1990, and # 316-05-C, dated December 31, 2005) (See Comment 6)

ix. For Emission Point (Ash Load-Out System), when operating, the owner or operator shall not allow PM emissions to exceed 3.2 lb/hr at maximum

throughput from the Ash Load-Out System. (Regulation 7.08, section 3.1.2) (See Comment 7)

x. For Emission Point (Lime Handling System), when operating, the owner or operator shall not allow PM emissions to exceed 0.3 lb/hr and 0.075 tons per calendar year from the Lime Handling System. (Regulation 7.08, section 3.1.2; Regulation 2.05; PSD Permits # 198-90-C, dated August 27, 1990, and # 318-05-C, dated December 31, 2005) (See Comment 8)

xi. For Emission Point (Coal Handling System), when operating, the owner or operator shall not allow PM emissions to exceed 0.154 lb/hr and 0.109 tons per calendar year from the Coal Handling System. (Regulation 7.08, section 3.1.2; Regulation 2.05; PSD Permits #197-90-C, dated August 27, 1990, and # 317-05-C, dated December 31, 2005) (See Comment 9)

xii. For Emission Point (Truck Lime Unloading), the Emission Point is a closed system, and there is no PM requirement for Regulation 7.08.

d. **Opacity**

i. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity. This standard applies at all times, except during periods of startup, shutdown or malfunction. (40 CFR 60.43b(f) and 63.43b(g) and Regulation 7.06, section 4.2) (See Comment 5)

ii. For Boiler #4, when combusting fuel oil, the owner or operator shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity. This standard applies at all times, except during periods of startup, shutdown or malfunction. (40 CFR 60.43c(c) and 63.43c(d) and Regulation 7.06, section 4.2) (See Comment 5)

iii. For Emission Points (Ash Handling System, Ash Load-Out System, Lime Handling System, and Coal Handling System), when operating, the owner or operator shall not cause to be discharged into the atmosphere any gases that may contain particulate matter that is equal to or greater than 20% opacity. (Regulation 7.08, section 3.1.1)

iv. For Emission Point (Truck Lime Unloading), the Emission Point is a closed system, and there is no Opacity requirement for Regulation 7.08.

e. **CO**

i. When Boiler #1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the CO emissions from Boiler #1 and Boiler #2 combined to

exceed 90.6 pounds per hour. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005)

ii. When Boiler #1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the CO emissions from Boiler #1 and Boiler #2 to exceed 0.21 lb/MM Btu heat input based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005)

iii. When combusting either natural gas or fuel oil, the owner or operator shall not allow the CO emissions from Boiler #3 and Boiler #4 to exceed 3.58 pounds per hour each. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005)

iv. When combusting either natural gas or fuel oil, the owner or operator shall not allow the CO emissions from Boiler #3 and Boiler #4 to exceed 0.036 lb/MM Btu heat input based on a 30-day rolling average. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005)

f. **Lead (Pb)**

i. When combusting coal, the owner or operator shall not allow the Lead (Pb) emissions from Boiler #1 and Boiler #2 combined to exceed 0.00114 lb/hr. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005)

ii. When combusting either natural gas or fuel oil, the owner or operator shall not allow the Lead (Pb) emissions from Boiler #3 and Boiler #4 to exceed 0.0055 lb/hr each. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005)

g. **Sulfuric Acid ($H_2SO_4$)**

i. When Boiler #1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the $H_2SO_4$ emissions from Boiler #1 and Boiler #2 combined to exceed 1.73 lbs/hr. The District has determined the Spray Dryer Reactor, C-U4-SDR, for sulfur dioxide control, meets the PSD BACT requirements for $H_2SO_4$. Therefore, $SO_2$ is used as a surrogate for $H_2SO_4$. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005; PSD Final Determination Document, dated October 24, 1990) (See Comment 12)

ii. When Boiler #1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the $H_2SO_4$ emissions from Boiler #1 and Boiler #2 to exceed 0.00408 lb/MM Btu heat input capacity. The District has determined the Spray Dryer Reactor, C-U4-SDR, for sulfur dioxide control, meets the PSD BACT requirements for $H_2SO_4$. (Regulation 2.05; PSD Permit # 312-05-C, dated December 31, 2005; PSD Final Determination Document, dated October 24, 1990)(See Comment 12)

iii. The owner or operator shall not allow the $H_2SO_4$ emissions from Boiler #3 and Boiler #4 to exceed 1.94 lbs/hr each. The District has determined that the 0.5% sulfur limit on #2 fuel oil in Additional Condition 1.b.vii. meets the PSD BACT requirements for $H_2SO_4$. There is no $H_2SO_4$ emission limit when either boiler is combusting natural gas. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005; PSD Final Determination Document, dated October 24, 1990)(See Comment 12)

iv. The owner or operator shall not allow the $H_2SO_4$ emissions from Boiler #3 and Boiler #4 to exceed 0.0196 lb/MM Btu heat input capacity each. The District has determined that the 0.5% sulfur limit on #2 fuel oil in Additional Condition 1.b.vii. meets the PSD BACT requirements for $H_2SO_4$. There is no $H_2SO_4$ emission limit when either boiler is combusting natural gas. (Regulation 2.05; PSD Permit # 313-05-C, dated December 31, 2005; PSD Final Determination Document, dated October 24, 1990)(See Comment 12)

h. **VOC**

i. When Boiler #1 and/or Boiler #2 are combusting coal, the owner or operator shall not allow the VOC emissions from Boiler #1 and Boiler #2 combined to exceed 1.27 lbs/hr. (Regulation 2.04; PSD Permit # 312-05-C, dated December 31, 2005)

ii. When combusting either natural gas or fuel oil, the owner or operator shall not allow the VOC emissions from Boiler #3 and Boiler #4 to exceed 0.145 lb/hr each. (Regulation 2.04; PSD Permit # 313-05-C, dated December 31, 2005)

iii. For Emission Point (Truck Fuel Oil Loading/Unloading),

1) When loading,

a) The owner or operator of any loading facility from which more than 200 gallons but less than 20,000 gallons of “volatile organic materials” are loaded in any one day shall not load any volatile organic materials into any tank, truck, trailer, or railroad car from any loading facility unless such loading is accomplished by submerged fill, bottom loading, or equivalent methods approved by the District. Pneumatic, hydraulic, or other mechanical means shall be provided to prevent liquid organic compounds drainage from the loading device when it is removed from the hatch, or to accomplish complete drainage before such removal. "Volatile organic material" means any volatile organic compound which has a true vapor pressure of 78 mm Hg (1.5 psia) or greater under actual storage conditions. This Emission Point, when loading,

is submerged fill/bottom loaded. (Regulation 7.22, section 3.1)

b) The owner or operator of any loading facility from which 20,000 gallons or more of "volatile organic materials" are loaded in any one day shall not load any volatile organic materials into any tank, truck, trailer, or railroad car from any loading facility unless such loading facility is equipped with a device which reduces the emissions of all hydrocarbon vapors and gases by at least 90% by weight, and which is properly installed, in good working order, and in operation. Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor recovery system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. This Emission Point, when loading, is a closed system, which the District has determined meets the minimum 90% emission reduction by weight requirement. (Regulation 7.22, section 3.2)

2) When unloading,

The Emission Point is a closed system, and there is no VOC BACT requirement for Regulation 7.25.

i. **HAP**

For Boiler #1, Boiler #2, Boiler #3 and Boiler #4, by no later than September 13, 2007, the owner or operator shall comply with the applicable standards as specified in 40 CFR Part 63 Subpart DDDDD.

j. **TAP** (Regulation 5.12, section 1)

The owner or operator shall not allow the TAP emissions to exceed the Adjusted Significant Level (ASL), unless modeling or a BACT analysis has been submitted and approved by the District. Boilers #1, #2, #3, and #4 are exempted from Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants per 401 KAR 63:022, section 1(2)(e), which exempts indirect fired fossil fuel heat exchangers.

i. For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there are no TAP requirements for Regulation 5.12.

ii. For Emission Point (Ash Handling System, Ash Load-Out System, and Lime Handling System), the owner or operator shall utilize TAP BACT for the particulate TAPs. The District has determined that the fabric filters (C-U4-

ASHSILO, C-U4-ASHLOAD, and C-U4-LIMESILO) are each considered TAP BACT for the particulate TAPs. (Regulation 5.12, section 1)

2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

a. **$NO_x$**

i. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall install, calibrate, maintain and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere. (See Appendix A) (40 CFR 60.48b(b)(1) and Regulation 6.42)

1) The continuous monitoring systems shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. (40 CFR 60.48b(c))

2) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by 40 CFR 60.48b(b)(1) shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(b). At least 2 data points must be used to calculate each 1-hour average. (40 CFR 60.48b(d))

3) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. (40 CFR 60.48b(e))

4) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7a, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. (40 CFR 60.48b(f))

ii. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator shall comply with the following:

1) Monitor and maintain records of the type and quantity of each fuel combusted for each operating day; and (40 CFR 60.48c(g))

2) The testing requirements specified in the $NO_x$ RACT Plan in Appendix A, Element 6. (Regulation 6.42, section 5)

iii. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator submitted a one-time compliance demonstration on March 10, 2004, showing that the potential $NO_x$ emissions do not exceed the standards in Additional Conditions 1.a.iv., 1.a.v., and 1.a.vi. Therefore, there are no $NO_x$ monitoring, recordkeeping, or reporting requirements for these boilers.

b. **$SO_2$**

i. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall install, calibrate, maintain and operate a continuous emission monitoring system (CEMs) for measuring $SO_2$ concentrations and carbon dioxide ($CO_2$) concentrations and shall record the output of the systems. The $SO_2$ and carbon dioxide concentrations shall both be monitored at the inlet and outlet of the $SO_2$ control device. (40 CFR 60.47b(a))

1) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in 40 CFR 60.47b(b). (40 CFR 60.47b(c))

2) The 1-hour average sulfur dioxide emission rates measured by the CEMS required by 40 CFR 60.47b(a) and required under 40 CFR 60.13(h) is expressed in ng/J or lb/million Btu heat input and is used to calculate the average emission rates under 40 CFR 60.42b. Each 1-hour average sulfur dioxide emission rate must be based on more than 30 minutes of steam generating unit operation and include at least 2 data points with each representing a 15-minute period. Hourly sulfur dioxide emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day. (40 CFR 60.47b(d))

3) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the CEMS. (40 CFR 60.47b(e))

4) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 (Appendix B of 40 CFR Part 60). (40 CFR 60.47b(e)(1))

5) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (Appendix F of 40 CFR Part 60). (40 CFR 60.47b(e)(2))

6) The span value of the sulfur dioxide CEMS at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the fuel combusted, and the span value of the CEMS at the outlet to the sulfur dioxide control device is 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the fuel combusted. (40 CFR 60.47b(e)(3))

ii. For Boiler #4, when combusting fuel oil, the $SO_2$ monitoring requirements of 40 CFR 60.46c(a) and (d) do not apply. The owner or operator demonstrates compliance with the $SO_2$ standards based on fuel supplier certification as described under 40 CFR 60.48c(f)(1). See Additional Condition 3.b.ii. (40 CFR 60.46c(e))

c. **PM**

i. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall conduct a Method 5 performance test for PM within the first two years of the permit issuance. The source performed an EPA Reference Method 5 performance test for PM emissions from Boiler #1 and Boiler #2 on December 3, 1992. The performance test demonstrated the PM emissions are 2.13 lb/hr and 0.007 lb/MMBtu from each boiler, which are in compliance with the PSD limits.

ii. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator submitted a one-time compliance demonstration on March 10, 2004, showing that the potential PM emissions do not exceed the standards in Additional Conditions 1.c.v., 1.c.vi., and 1.c.vii. Therefore, there are no PM compliance monitoring, recordkeeping, or reporting requirements for these boilers.

iii. For the fabric filters (C-U4-ASHSILO, C-U4-ASHLOAD, C-U4-LIMESILO, and C-U4-COALSILO) controlling respective Emission Points (Ash Handling System, Ash Load-Out System, Lime Handling System, and Coal Handling System), the owner or operator shall, when operating,

1) Perform a visual inspection of the structural and mechanical integrity (i.e., for signs of damage, air leakage, corrosion, etc.) on the external portion of the unit, monthly, and repair as needed.

2) Perform a visual inspection of the filter media for deterioration, monthly, and replace and repair as needed.

iv. For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there is no PM compliance monitoring requirement for Regulation 7.08.

v. For the Fabric Filter (C-U4-BAGHOUSE), the owner or operator shall monitor the pressure drop once per 8 hours. After the first six months, the owner or operator shall establish an appropriate pressure drop range. The data and the appropriate range shall be submitted to the District for approval within 30 days after the six month period. The District may change the monitoring frequency. The owner or operator shall demonstrate compliance with the approved pressure drop range.

d. **Opacity**

i. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall install, calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. (40 CFR 60.48b(a))

ii. For Boiler #3 and Boiler #4, when combusting natural gas:

1) The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the PM emission points/stack (S-U4-BLR3/4). No more than four emission points/stacks shall be observed simultaneously.

2) At emission points/stacks where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR 60, Appendix A, within 24 hours of the initial observation.

iii. For Boiler #4, when combusting fuel oil:

1) The owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM emission points/stack (S-U4-BLR3/4). No more than four emission points/stacks shall be observed simultaneously.

2) At emission points/stacks where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR 60, Appendix A, within 24 hours of the initial observation.

iv. For each Emission Point (Ash Handling System, Ash Load-Out System, Lime Handling System, and Coal Handling System), when each is operating,

1) The owner or operator shall conduct a daily one-minute visible emissions survey, during normal operation and daylight hours, of the PM emission points/stacks or the nearest opening in the enclosure for the Ash Load-Out System. No more than four emission points/stacks/openings shall be observed simultaneously.

2) At emission points/stacks/openings where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR 60, Appendix A, within 24 hours of the initial observation.

v. For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there are no Opacity compliance monitoring requirements for Regulation 7.08.

e. **CO**

i. For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the owner or operator submitted a one-time compliance demonstration on March 10, 2004, showing that the potential CO emissions do not exceed the applicable standards in Additional Condition 1.e. Therefore, there are no CO compliance monitoring, recordkeeping, or reporting requirements for these boilers.

ii. For Boiler #3 and Boiler #4, when combusting natural gas, the owner or operator submitted performance test results on April 30, 2004, for testing conducted on March 2, 2004, showing that the CO emissions do not exceed the applicable standards in Additional Conditions 1.e.iii. and 1.e.iv. Therefore, there are no CO compliance monitoring, recordkeeping, or reporting requirements for these boilers.

f. **Lead (Pb)**

For Boiler #1 and Boiler #2, when combusting coal, and for Boiler #3 and Boiler #4, when combusting natural gas or fuel oil, the owner or operator submitted a one-time compliance demonstration on August 31, 2000, showing that the potential Lead (Pb) emissions do not exceed the standards in Additional Conditions 1.f.i. and 1.f.ii. Therefore, there are no Lead (Pb) compliance monitoring, recordkeeping, or reporting requirements for these boilers.

g. **Sulfuric Acid ($H_2SO_4$)**

For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the District has determined that the $SO_2$ compliance monitoring requirements in Additional Condition 2.b. are sufficient to assure $H_2SO_4$ compliance per the PSD Final Determination dated October 24, 1990. When combusting natural gas in Boiler #3 and/or Boiler #4, there are no $H_2SO_4$ standards, monitoring, recordkeeping, or reporting. (See Comment 12)

h. **VOC**

i. For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the owner or operator submitted a one-time compliance demonstration dated March 10, 2004 showing that the potential VOC emissions do not exceed the applicable standards in Additional Conditions 1.h.i. and 1.h.ii. Therefore, there are no VOC compliance monitoring, recordkeeping, or reporting requirements for these boilers.

ii. For Boiler #3 and Boiler #4, when combusting natural gas, the owner or operator submitted performance test results on April 30, 2004, for testing conducted on March 2, 2004, showing that the VOC emissions do not exceed the applicable standard in Additional Condition 1.h.ii. Therefore, there are no VOC compliance monitoring, recordkeeping, or reporting requirements for these boilers.

iii. For Emission Point (Truck Fuel Oil Loading/Unloading),

1) When loading, this Emission Point is a closed system, and there are no compliance monitoring requirements for Regulation 7.22.

2) When unloading, this Emission Point is a closed system, and there are no VOC BACT compliance monitoring requirements for Regulation 7.25.

i. **HAP**

For Boiler #1, Boiler #2, Boiler #3 and Boiler #4, by September 13, 2007, the owner or operator shall comply with the applicable compliance monitoring requirements as specified in 40 CFR Part 63 Subpart DDDDD.

j. **TAP**

i. For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there are no TAP compliance monitoring requirements for Regulation 5.12.

ii. For Emission Points (Ash Handling System, Ash Load-Out System, and Lime Handling System), see Additional Condition 2.c.iii.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **$NO_x$**

i. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall record and maintain records of the amount of coal fuel combusted during each day and calculate the annual capacity factor individually for coal for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (40 CFR 60.49b(d))

ii. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall maintain records of the following information for each steam generating unit operating day: (40 CFR 60.49b(g))

1) Calendar date. (40 CFR 60.49b(g)(1))

2) The average hourly nitrogen oxides emission rates (expressed as $NO_2$) (ng/J or lb/million Btu heat input) measured or predicted. (40 CFR 60.49b(g)(2))

3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days. (40 CFR 60.49b(g)(3))

4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken. (40 CFR 60.49b(g)(4))

5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken. (40 CFR 60.49b(g)(5))

6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data. (40 CFR 60.49b(g)(6))

7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted. (40 CFR 60.49b(g)(7))

8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system. (40 CFR 60.49b(g)(8))

9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3. (40 CFR 60.49b(g)(9))

10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60 Appendix F, Procedure 1. (40 CFR 60.49b(g)(10))

iii. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator submitted a one-time compliance demonstration dated March 10, 2004 showing that the potential $NO_x$ emissions do not exceed the standards in Additional Conditions 1.a.iv., 1.a.v., and 1.a.vi. Therefore, there are no $NO_x$ compliance monitoring, recordkeeping, or reporting requirements for these boilers.

iv. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil,

1) The owner or operator shall keep records of the amount of fuel combusted during each month. (40 CFR 60.48c(g) as modified by EPA letter dated March 7, 2002) (See Comment 17)

2) The owner or operator shall keep a monthly record of the hours of operation for each boiler. (40 CFR 60.48c(g) as modified by EPA letter dated March 7, 2002) (See Comment 17)

3) The owner or operator shall monthly calculate the prorated fuel usage of the boiler by correlating the design heat input capacity of all natural gas fired units at the plant. (40 CFR 60.48c(g) and EPA Letter dated March 7, 2002)(See Comment 17)

v. For Boiler #1 and Boiler #2, when combusting coal, and Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boilers; any malfunction of the air pollution control equipment; or any periods during which a CEMS or monitoring device is inoperative. (40 CFR 60.7(b))

vi. For Boiler #1 and Boiler #2, when combusting coal, and Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator shall keep a record identifying all deviations from the requirements of the $NO_x$ RACT Plan. ($NO_x$ RACT Plan, Appendix A, Element 7)

b. **$SO_2$**

i. For Boiler # 1 and Boiler #2, when combusting coal, the owner or operator shall maintain records of the following information for each steam generating unit operating day: (40 CFR 60.49b(k))

1) Calendar dates covered in the reporting period. (40 CFR 60.49b(k)(1))

2) Each 30-day average sulfur dioxide emission rate (ng/J or 1b/million Btu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken. (40 CFR 60.49b(k)(2))

3) Each 30-day average percent reduction in sulfur dioxide emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken. (40 CFR 60.49b(k)(3))

4) Identification of the steam generating unit operating days that coal or oil was combusted and for which sulfur dioxide or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken. (40 CFR 60.49b(k)(4))

5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit. (40 CFR 60.49b(k)(5))

6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted. (40 CFR 60.49b(k)(6))

7) Identification of times when hourly averages have been obtained based on manual sampling methods. (40 CFR 60.49b(k)(7))

8) Identification of the times when the pollutant concentration exceeded full span of the CEMS. (40 CFR 60.49b(k)(8))

9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3. (40 CFR 60.49b(k)(9))

10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR 60 Appendix F, Procedure 1. (40 CFR 60.49b(k)(10))

11) The annual capacity factor of each fired as provided in 40 CFR 60.49b(d). (40 CFR 60.49b(k)(11))

ii. For Boiler #4, when combusting fuel oil, for which records of fuel supplier certification are used to demonstrate compliance with the fuel oil sulfur limit of Additional Condition 1.b.vii., the owner or operator shall maintain the following fuel supplier certification records. (40 CFR 60.48c(e)(11) and 40 CFR 60.48c(f))

1) The name of the oil supplier; and (40 CFR 60.48c(f)(1)(i))

2) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. (40 CFR 60.48c(f)(1)(ii))

c. **PM**

i. For Boiler #1 and Boiler #2, when combusting coal, there are no PM compliance recordkeeping requirements for these boilers. The source performed an EPA Reference Method 5 performance test for PM emissions from Boiler #1 and Boiler #2 on December 3, 1992. The performance test demonstrated the PM emissions are 2.13 lb/hr and 0.007 lb/MMBtu from each boiler, which are in compliance with the PSD limits. Therefore, there are no PM compliance monitoring, recordkeeping, or reporting requirements for these boilers.

ii. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator submitted a one-time compliance demonstration on March 10, 2004, showing that the potential PM emissions do not exceed the standards in Additional Conditions 1.c.v., 1.c.vi., and 1.c.vii. Therefore, there are no PM compliance monitoring, recordkeeping, or reporting requirements for these boilers.

iii. For the fabric filters (C-U4-ASHSILO, C-U4-ASHLOAD, C-U4-LIMESILO, and C-U4-COALSILO) controlling respective Emission Points (Ash Handling System, Ash Load-Out System, Lime Handling System, and Coal Handling System), the owner or operator shall keep a record of the inspections performed in accordance with Additional Condition 2.c.iii.

iv. For Emission Point (Lime Handling System), the owner or operator shall keep a monthly record of the amount of lime transferred.

v. For Emission Point (Lime Handling System), the owner or operator shall calculate the monthly and 12 consecutive month PM emissions using the following equation:

$$E_{Month} = (EF)(MonthlyThroughput)$$

Where,

EF = 0.0036 lbPM/1000 lb throughput (AP-42, section 9.9.1-1 *Talc Processing (Talc Storage Bin Loading with Fabric Filter)*)

vi. For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there is no PM compliance recordkeeping requirement for Regulation 7.08.

vii. For the Fabric Filter (C-U4-BAGHOUSE), the owner or operator shall keep a record of the pressure drop every 8 hours.

d. **Opacity**

i. For Boiler #1 and Boiler #2, when combusting coal, the owner or operator shall maintain records of the opacity. (40 CFR 60.49b(f))

ii. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, the owner or operator shall maintain records of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date and time of the survey, the name (or initials) of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given day (week or month, as appropriate), then no visible emissions survey needs to be performed and a negative declaration may be entered in the record.

iii. For each Emission Point (Ash Handling System, Ash Load-Out System, Lime Handling System, and Coal Handling System), when operating, the owner or operator shall maintain records of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date and time of the survey, the name (or initials) of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given week, then no visible emissions survey needs to be performed and a negative declaration may be entered in the record.

iv. For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there are no Opacity compliance recordkeeping requirement for Regulation 7.08.

e. **CO**

i. For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the owner or operator submitted a one-time compliance demonstration dated March 10, 2004 showing that the potential CO emissions do not exceed the applicable standards in Additional Conditions 1.e.i., 1.e.ii., 1.e.iii., and 1.e.iv. Therefore, there are no CO monitoring, recordkeeping, or reporting requirements for these boilers.

ii. For Boiler #3 and Boiler #4, when combusting natural gas, the owner or operator submitted performance test results on April 30, 2004, for testing conducted on March 2, 2004, showing that the CO emissions do not exceed the applicable standards in Additional Conditions 1.e.iii. and 1.e.iv. Therefore, there are no CO compliance monitoring, recordkeeping, or reporting requirements for these boilers.

f. **Lead (Pb)**

For Boiler #1 and Boiler #2, when combusting coal, and for Boiler #3 and Boiler #4, when combusting natural gas or fuel oil, the owner or operator submitted a one-time compliance demonstration on August 31, 2000, showing that the potential Lead (Pb) emissions do not exceed the standards in Additional Conditions 1.f.i. and 1.f.ii. Therefore, there are no Lead (Pb) compliance monitoring, recordkeeping, or reporting requirements for these boilers.

g. **Sulfuric Acid ($H_2SO_4$)**

For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the District has determined that the $SO_2$ compliance monitoring requirements in Additional Condition 2.b. are sufficient to assure $H_2SO_4$ compliance per the PSD Final Determination dated October 24, 1990. When combusting natural gas in Boiler #3 and/or Boiler #4, there are no $H_2SO_4$ standards, monitoring, recordkeeping, or reporting. (See Comment 12)

h. **VOC**

i. For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the owner or operator submitted a one-time compliance demonstration dated March 10, 2004 showing that the potential VOC emissions do not exceed the applicable standards in Additional Conditions 1.h.i. and 1.h.ii. Therefore, there are no VOC compliance monitoring, recordkeeping, or reporting requirements for these boilers.

ii. For Boiler #3 and Boiler #4, when combusting natural gas, the owner or operator submitted performance test results on April 30, 2004, for testing conducted on March 2, 2004, showing that the VOC emissions do not exceed the applicable standard in Additional Condition 1.h.ii. Therefore, there are

no VOC compliance monitoring, recordkeeping, or reporting requirements for these boilers.

iii. For Emission Point (Truck Fuel Oil Loading/Unloading),

1) When loading, this Emission Point is a closed system, and there are no VOC compliance recordkeeping requirements for Regulation 7.22.

2) When unloading, this Emission Point is a closed system, and there are no VOC BACT compliance recordkeeping requirements for Regulation 7.25.

i. **HAP**

For Boiler #1, Boiler #2, Boiler #3 and Boiler #4, by no later than September 13, 2007, the owner or operator shall comply with the applicable compliance recordkeeping requirements as specified in 40 CFR Part 63 Subpart DDDDD.

j. **TAP**

i. For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there are no TAP requirements for Regulation 5.12.

ii. For Emission Points (Ash Handling System, Ash Load-Out System, and Lime Handling System), see Additional Condition 3.c.iii.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the Boiler CEMS Semiannual Reports, Title V Semiannual Reports, and the $NO_x$ RACT Semiannual Reports. Duplicative reporting is not required. If no deviations occur in a reporting period, the owner or operator shall report a negative declaration for each of the following.(See Comment 19)

a. **Boiler CEMS Semiannual Reports**

For Boiler #1, Boiler #2, Boiler #3, and Boiler #4, the owner or operator shall report semiannually the following information, with the report required to be postmarked by the 30$^{th}$ day following the end of the reporting period. (40 CFR 60.49b(w) for Boiler #1 and Boiler #2, and 40 CFR 60.48c(j) for Boiler #3 and Boiler #4) (See Comment 19)

i. **$NO_x$**

1) For Boiler #1 and Boiler #2, when combusting coal, the owner or operator of any affected facility subject to the continuous monitoring

requirements for nitrogen oxides under 40 CFR 60.48(b) shall submit reports containing the information recorded under 40 CFR 60.49b(g). (40 CFR 60.49b(i))

2) For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, there are no Boiler CEMS $NO_x$ Semiannual Reporting requirements.

ii. **$SO_2$**

1) For Boiler #1 and Boiler #2, when combusting coal, (40 CFR 60.49b(j) and 40 CFR 60.49b(k))

a) Calendar dates covered in the reporting period. (40 CFR 60.49b(k)(1))

b) Each 30-day average sulfur dioxide emission rate (ng/J or lb/MM Btu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken. (40 CFR 60.49b(k)(2))

c) Each 30-day average percent reduction in sulfur dioxide emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken. (40 CFR 60.49b(k)(3))

d) Identification of the steam generating unit operating days that coal or oil was combusted and for which sulfur dioxide or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken. (40 CFR 60.49b(k)(4))

e) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit. (40 CFR 60.49b(k)(5))

f) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted. (40 CFR 60.49b(k)(6))

g) Identification of times when hourly averages have been obtained based on manual sampling methods. (40 CFR 60.49b(k)(7))

h) Identification of the times when the pollutant concentration exceeded full span of the CEMS. (40 CFR 60.49b(k)(8))

i) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3. (40 CFR 60.49b(k)(9))

j) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1. (40 CFR 60.49b(k)(10))

k) The annual capacity factor of each fired as provided under 40 CFR 60.49(d). (40 CFR 60.49b(k)(11))

l) For each affected facility subject to the sulfur dioxide standards under 40 CFR 60.42b for which the minimum amount of data required under 40 CFR 60.47b(f) were not obtained during the reporting period, the following information is reported in addition to that required under 60.49b(k). (40 CFR 60.49b(m)) Note, the regulatory citation of 40 CFR 60.47b(f) is incorrect; it should be 40 CFR 60.47b(c).

(A) The number of hourly averages available for outlet emission rates and inlet emission rates. (40 CFR 60.49b(m)(1))

(B) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19, section 7. (40 CFR 60.49b(m)(2))

(C) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19, section 7. (40 CFR 60.49b(m)(3))

(D) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19, section 7. (40 CFR 60.49b(m)(4))

2) For Boiler #3 and Boiler #4, when combusting natural gas, there are no Boiler CEMS $SO_2$ Semiannual Reporting requirements.

3) For Boiler #4, when combusting fuel oil,

a) Calendar dates covered in the reporting period. (40 CFR 60.48c(e)(1))

b) A certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. (40 CFR 60.48c(e)(11))

c) The name of the oil supplier. (40 CFR 60.48c(f)(1)(i))

d) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. (40 CFR 60.48c(f)(1)(ii))

iii. CEMS Analyzers Quality Assurance Procedures

1) As applicable, results of the Cylinder Gas Audits (CGA) conducted in three of the four calendar quarters, but in no more than three quarters in succession. The Cylinder Gas Audits (CGA) shall be conducted in accordance with 40 CFR 60 Appendix B, Performance Specifications 2 or 3. (40 CFR 60, Appendix F)

2) As applicable, results of the Relative Accuracy Test Audit (RATA) conducted at least once every four calendar quarters. The Relative Accuracy Test Audit (RATA) shall be conducted in accordance with 40 CFR 60 Appendix B, Performance Specifications 2 or 3. (40 CFR 60, Appendix F)

b. **Title V Semiannual Reports**

The owner or operator shall include the following information in the Title V Semiannual Report. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. (See Comment 19)

i. **$NO_x$**

For Boiler #1 and Boiler #2,

1) Emission Unit ID number, and/or Emission point ID number
2) The beginning and ending date of the reporting period
3) Identification of all periods of exceedance of the pound per hour $NO_x$ limits in Additional Condition 1.a.i.
4) Description of any corrective action taken for each exceedance

ii. **$SO_2$**

For Boiler #1 and Boiler #2,

1) Emission Unit ID number, and/or Emission point ID number
2) The beginning and ending date of the reporting period
3) Identification of all periods of exceedance of the pound per hour $SO_2$ limits in Additional Conditions 1.b.i.
4) Description of any corrective action taken for each exceedance

iii. **PM**

1) For Boiler #1, Boiler #2, Boiler #3, and Boiler #4, there are no Title V Semiannual reporting requirements for PM.

2) For Emission Points (Ash Handling System, Ash Load-Out System, Lime Handling System, and Coal Handling System),

   a) Emission Unit ID number, and/or Emission point ID number
   b) The beginning and ending date of the reporting period
   c) Description of any corrective action taken

3) For Emission Point (Lime Handling System),

   a) Emission Unit ID number, and/or Emission point ID number
   b) The beginning and ending date of the reporting period
   c) Monthly and 12 consecutive month PM emissions for each month in the reporting period
   d) Description of any corrective action taken

4) For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there is no PM compliance recordkeeping requirement for Regulation 7.08.

5) For the Fabric Filter (C-U4-BAGHOUSE),

   a) Emission Unit ID number, and/or Emission point ID number
   b) The beginning and ending date of the reporting period
   c) The pressure drop, range, and date for any deviation
   d) Description of any corrective action taken

iv. **Opacity**

1) For Boiler #1 and Boiler #2, when combusting coal, there are no Opacity compliance reporting requirements.

2) For Emission Points (Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, Ash Handling System, Ash Load-Out System, Lime Handling System, and Coal Handling System),

i. Emission unit ID number and emission point and/or stack ID number;
ii. The beginning and ending date of the reporting period;
iii. The date, time and results of each visible emissions survey conducted that resulted in visible emissions being observed. If no visible emissions were observed during the reporting period, the owner or operator may submit a negative declaration;
iv. The date, time and results of each Method 9 conducted. If there were no Method 9 tests performed during the reporting period, the owner or operator may submit a negative declaration; and
v. Description of any corrective action taken.

3) For Emission Point (Truck Lime Unloading), this Emission Point is a closed system, and there is no Opacity compliance recordkeeping requirement for Regulation 7.08.

v. **CO**

There are no Title V Semiannual Reporting requirements for CO.

vi. **Lead (Pb)**

There are no Title V Semiannual Reporting requirements for Lead (Pb).

vii. **Sulfuric Acid ($H_2SO_4$)**

For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the District has determined that the $SO_2$ compliance monitoring requirements in Additional Condition 2.b. are sufficient to assure $H_2SO_4$ compliance per the PSD Final Determination dated October 24, 1990. When combusting natural gas in Boiler #3 and/or Boiler #4, there are no $H_2SO_4$ standards, monitoring, recordkeeping, or reporting.

viii. **VOC**

1) For Boiler #1 and Boiler #2, when combusting coal, and Boiler #4, when combusting fuel oil, the owner or operator submitted a one-time compliance demonstration dated March 10, 2004 showing that the potential VOC emissions do not exceed the applicable standards in Additional Conditions 1.h.i. and 1.h.ii. Therefore, there are no VOC

compliance monitoring, recordkeeping, or reporting requirements for these boilers.

2) For Boiler #3 and Boiler #4, when combusting natural gas, the owner or operator submitted performance test results on April 30, 2004, for testing conducted on March 2, 2004, showing that the VOC emissions do not exceed the applicable standards in Additional Condition 1.h.ii. Therefore, there are no VOC compliance monitoring, recordkeeping, or reporting requirements for these boilers.

3) For Emission Point (Truck Fuel Oil Loading/Unloading), there are no Title V Semiannual Reporting requirements for VOC.

ix. **TAP**

There are no Title V Semiannual Reporting requirements for TAP.

c. **$NO_x$ RACT Plan Semiannual Reports**

For Boiler #1, Boiler #2, Boiler #3, and Boiler #4, the owner or operator shall submit a written report of all deviations from the requirements of the $NO_x$ RACT Plan that occurred during the preceding semiannual period. Semiannual periods shall be January 1st through June 30th and July 1st through December 31st. If no deviation occurred during the semiannual period, the owner or operator shall report a negative declaration. The report shall be submitted within 60 days following the end of the semiannual period. The report shall contain the following information. (See Appendix A)(See Comment 19)

i. Boiler number,
ii. The beginning and ending date of the reporting period,
iii. Identification of all periods during which a deviation occurred,
iv. A description, including the magnitude, of the deviation,
v. If known the cause of the deviation,
vi. A description of all corrective actions taken to abate the deviation.

d. **MACT Semiannual Reports**

For Boiler #1, Boiler #2, Boiler #3, and Boiler #4, by no later than September 13, 2007, the owner or operator shall comply with the applicable compliance reporting requirements as specified in 40 CFR 63 Subpart DDDDD.

**U4 Comments**

**$\underline{NO_x}$**

1. Demonstrating compliance with the lower limit of 0.50 lb/MMBtu on a 30 day rolling average in Additional Condition 1.a.iii. for Boiler #1 and Boiler #2 and 0.20 lb/MMBtu on a 30 day rolling average in Additional Condition 1.a.vi. for Boiler #3 and Boiler #4, also demonstrates compliance with Additional Conditions 1.a.ii. and 1.a.v., respectively.

2. For Boilers #1, #2, #3, and #4, there are no $NO_x$ emission standards, monitoring, recordkeeping, or reporting under Regulation 7.06, because these boilers are less than 250 MMBtu/hr. For Boilers #3 and #4, there are no $NO_x$ emission standards, monitoring, recordkeeping, or reporting under 40 CFR 60 Subpart Dc.

**$SO_2$**

3. When combusting natural gas in Boiler #3 and/or Boiler #4, there are no $SO_2$ emission standards, monitoring, recordkeeping, or reporting under 40 CFR 60 Subpart Dc.

**PM/Opacity**

4. For Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, there are no PM emission standards, monitoring, recordkeeping, or reporting under 40 CFR Part 60 Subpart Dc. When combusting natural gas, there are also no opacity standards, monitoring, recordkeeping, or reporting under 40 CFR 60 Subpart Dc.

5. The District has at ASRC's request streamlined the permit to only include the more stringent opacity standard from 40 CFR 60 Subpart Db or Dc and Regulation 7.06.

6. Using the AP-42, section 11.12 *Concrete Batching (Cement Loading to Silo)* controlled emission factor of 0.00099 lbPM/ton and a maximum throughput of 16 ton/hr, Emission Point (Ash Handling System) can not exceed the ton per year nor lb/hr standards.

7. Using the AP-42, section 11.12 *Concrete Batching (Truck Loading)* controlled emission factor of 0.0568 lbPM/ton and a maximum throughput of 16 ton/hr, Emission Point (Ash Load Out System) can not exceed the lb/hr standard.

8. Using the AP-42, section 9.9.1-1 *Talc Processing (Talc storage bin loading with fabric filter)* controlled emission factor of 0.0036 lbPM/1000 lb and a maximum throughput of 15 ton/hr, Emission Point (Lime Handling System) can not exceed the lb/hr standard.

9. Using the AP-42, section 11.19-2 *Crushed Stone Processing (Conveyor Transfer)* controlled emission factor of 0.00014 lbPM/ton and a maximum throughput of 75 ton/hr each, Emission Point (Coal Handling System) can not exceed the ton per year nor lb/hr standards.

**CO**

10. For Boiler #1 and Boiler #2, and for Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, there are no CO standards, monitoring, recordkeeping, or reporting under either 40 CFR Part 60 Subparts Db or Dc, or Regulation 7.06.

**Lead (Pb)**

11. For Boiler #1 and Boiler #2, and for Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, there are no Lead (Pb) standards, monitoring, recordkeeping, or reporting under either 40 CFR Part 60 Subparts Db or Dc, or Regulation 7.06.

**$H_2SO_4$**

12. For Boiler #1 and Boiler #2, and for Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, there are no $H_2SO_4$ standards, monitoring, recordkeeping, or reporting under either 40 CFR Part 60 Subparts Db or Dc, or Regulation 7.06.

**VOC**

13. For Boiler #1 and Boiler #2, and for Boiler #3 and Boiler #4, when combusting either natural gas or fuel oil, there are no VOC standards, monitoring, recordkeeping, or reporting under either 40 CFR Part 60 Subparts Db or Dc, or Regulation 7.06.

14. Regulation 7.22 applies only to the loading of Volatile Organic Materials (VOM), which are any Volatile Organic Compounds (VOC) having a true vapor pressure of 1.5 psia or greater under actual storage conditions. VOCs which are not VOM are not subject to this regulation. There are no standards if each loading facility loads less than 200 gallons per day of VOMs.

**Miscellaneous**

15. The East and West Fuel Oil storage tanks are exempt from 40 CFR 60 Subpart Kb (*Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984)* according to 40 CFR 60.110b(b). Because there are no applicable requirements for these tanks, they are listed as Insignificant Activities.

16. The New Source Performance Standards Prevention of Significant Deterioration Final Determination is dated October 24, 1990. The final determination indicates that the proposed construction of the energy facilities for American Synthetic Rubber Company LLC will comply with all applicable air pollution regulations provided the boilers are installed and operated in accordance with the permit.

17. In a letter dated March 7, 2002 from EPA Region 4, EPA has identified certain types of alternative recordkeeping requirements for units that are regulated under 40 CFR 60 Subpart Dc (Standards of Performance for Small Industrial-Commerical-Institutional Steam Generating Units) that can be approved by the District without additional input from EPA.

18. The definition of “Day” for U4 is the time period from midnight to midnight.

19. The following is a summary of the report periods and due dates for the reports required by this emission unit:

| Report Description | Report Period | Report due dates |
|---|---|---|
| 1st Semiannual for CEMS | January 1 through June 30 | July 30 |
| 2nd Semiannual for CEMS | July 1 through December 31 | January 30 |
| 1st Semiannual for Title V | January 1 through June 30 | August 29 |
| 2nd Semiannual for Title V | July 1 through December 31 | March 1* |
| 1st Semiannual for $NO_x$ RACT | January 1 through June 30 | August 29 |
| 2nd Semiannual for $NO_x$ RACT | July 1 through December 31 | March 1* |

* The date for leap years is February 29.

**Emission Unit UMSC:** Miscellaneous

**Emission Unit Description:** Miscellaneous

**UMSC Applicable Regulations**

| Federally Enforceable Regulation | | |
|---|---|---|
| **Regulation** | **Subject** | **Applicable Sections** |
| 5.15 | Chemical Accident Prevention Provisions | 1 |
| 6.18 | Standards of Performance for Solvent Metal Cleaning Equipment | 1 through 4 |
| 6.40 | Standards of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery and Control) | 1.3 |
| 7.15 | Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery) | 1, 2, 3.1, 3.3, 3.4, 3.6, 3.7, 3.8 and 5 |
| 40 CFR 68 | Chemical Accident Prevention Provisions | Subparts A through H |

| District Only Enforceable Regulations | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 5.11 | Standards of Performance for Existing Processes or Process Equipment Emitting Toxic Air Pollutants | 1 through 6 |
| 5.12 | Standards of Performance for New or Modified Processes or Process Equipment Emitting Toxic Air Pollutants | 1 through 5 |

| UMSC Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-UMSC"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| Gasoline Tank | Above-Ground Unleaded Gasoline Storage Tank 550 gal 1995 | 6.40 | See AC 1.a.i. | None | S-UMSC-GASTK |
| | | 7.15 | Stage I vapor recovery system | | |
| Parts Washers | Solvent Metal Cleaning Equipment (5 parts washers/cold cleaners plus one which is temporarily at the plant from time to time) | 6.18 | See ACs 1.a.ii, 1.a.iii., and 1.a.iv. | None | N/A |
| WWTP Truck Unloading | WWTP Truck Unloading 1975 | 5.11 | Closed system | N/A | N/A |
| D-115 | WWTP Storage Tank 2,500 gal 1975 | 5.11 | ASL | None | S-UMSC-D-115 |

| UMSC Emission Points | | | | | |
|---|---|---|---|---|---|
| **ID "E-UMSC"** | **Description** | **Applicable Regulation(s)** | **Allowable Emission/ Equipment Standard** | **Control Device** | **Stack ID** |
| D-203 | WWTP Storage Tank<br>7,000 gal Late 1990's | 5.12 | ASL | None | S-UMSC-D-203 |
| Refrigeration | Plant Refrigeration System<br>Receivers (3)<br>1950's (1) and 1990's (2) | 5.11/5.12 | Closed system | N/A | N/A |
| | | 5.15 | Closed system | | |

**UMSC Additional Conditions**

1. **Standards** (Regulation 2.16, section 4.1.1)

   a. **VOC**

      i. For Emission Point (Gasoline Tank), (Regulation 7.15, section 3; and Regulation 6.40, section 1.3)

         1) The owner or operator of an affected facility shall install, maintain, and operate the following devices on the storage tank: (Regulation 7.15, section 3.1)

            a) Submerged fill pipe; (Regulation 7.15, section 3.1.1)

            b) If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank; (Regulation 7.15, section 3.1.2)

            c) Vent line restrictions on the affected facility; and (Regulation 7.15, section 3.1.3)

            d) Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50% of the liquid fill hose cross-sectional area for each tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size and design of the vapor balance system are subject to the approval of the District. (Regulation 7.15, section 3.1.4)

         2) The owner or operator shall not allow delivery of fuel to the storage tanks until the vapor balance system is properly connected to the transport vehicle and the affected facility. (Regulation 7.15, section 3.3)

         3) No person shall deliver gasoline to a service station as defined in Regulation 7.15 without connecting the vapor return hose between the tank of the delivery truck and the storage tank receiving the product. The vapor balance system must be operating in accordance with the manufacturer's specifications. (Regulation 7.15, section 3.4)

4) The owner or operator shall equip above ground tanks with dry breaks with any liquid spillage upon the line disconnect not exceeding 10 ml. (Regulation 7.15, section 3.7)

5) The owner or operator shall operate and maintain equipment with no defects and: (Regulation 7.15, section 3.8)

a) All fill tubes shall be equipped with vapor-tight covers including gaskets, (Regulation 7.15, section 3.8.1)

b) All dry breaks shall have vapor-tight seals and shall be equipped with vapor-tight covers or dust covers, (Regulation 7.15, section 3.8.2)

c) All vapor return passages shall be operated so there can be no obstruction of vapor passage from the storage tank back to the delivery vehicle, (Regulation 7.15, section 3.8.3)

d) All storage tank vapor return pipes and fill pipes without dry breaks shall be equipped with vapor-tight covers including gaskets, and (Regulation 7.15, section 3.8.4)

e) All hoses, fittings, and couplings shall be in a vapor-tight condition. (Regulation 7.15, section 3.8.5)

6) The owner or operator shall not exceed 10,000 gallons of gasoline based upon calculating the average volume of gasoline dispensed per month over the consecutive 12 month period, in order to be exempted from Regulation 6.40, except for the recordkeeping and reporting requirements. (Regulation 6.40, section 1.1 and 1.3)

ii. For Emission Point (Parts Washers), the owner or operator shall install, maintain, and operate the control equipment as follows: (Regulation 6.18, section 4)

1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, section 4.1.1)

2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, section 4.1.2)

3) A permanent, conspicuous label summarizing the operating requirements specified in Additional Condition 1.a.iii. shall be installed on or near the cold cleaner.(Regulation 6.18, section 4.1.3)

4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, section 4.1.4)

5) If the solvent is heated above 120°F, then one of the following control devices shall be used: (Regulation 6.18, section 4.1.5)

a) Freeboard with a freeboard ratio equal to or greater than 0.7, (Regulation 6.18, section 4.1.5.1)

b) Water cover, provided that the solvent is insoluble in, and heavier than, water, or (Regulation 6.18, section 4.1.5.2)

c) Another system, approved by the District, that provides equivalent control, such as a refrigerated chiller or carbon adsorber. (Regulation 6.18, section 4.1.5.3)

6) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, section 4.1.6)

7) If a pump-agitated solvent bath is used, then the agitator shall be operated to produce no more than a rolling motion of solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. An air-agitated solvent bath shall not be used. (Regulation 6.18, section 4.1.7)

8) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, section 4.1.8)

iii. For Emission Point (Parts Washers), the owner or operator shall observe at all times the following operating requirements: (Regulation 6.18, section 4.2)

1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows

pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, section 4.2.1)

2) The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, section 4.2.2)

3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, section 4.2.3)

4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, section 4.2.4)

5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, section 4.2.5)

6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. (Regulation 6.18, section 4.2.6)

7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, section 4.2.7)

iv. For Emission Point (Parts Washers), the owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, section 4.3.2)

b. **TAP**

The owner or operator shall not allow or cause the TAP emissions to exceed the adjusted significant level (ASL) value, unless modelling or a RACT or BACT analysis has been submitted and approved by the District. (Regulations 5.11 and 5.12, section 1)

c. **District Regulation 5.15 Regulated Substance** (40 CFR Part 68, Subpart G)

The owner or operator shall comply with the Risk Management Plan submitted to the District and to the U.S. E.P.A. (See Off-Permit Documents Section of this permit)

2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

a. **VOC**

i. For Emission Point (Gasoline Tank), See Additional Condition 3.a.

ii. For Emission Point (Parts Washers), the owner or operator shall conduct monthly inspections to verify compliance with the control and operational requirements specified in Additional Conditions 1.a.ii. and 1.a.iii.

b. **TAP**

i. For Emission Points (WWTP Truck Unloading, D-115, and D-203), the potential plant-wide TAP emissions for sulfuric acid are below the ASL. Therefore, there are no compliance monitoring requirements for these Emission Points.

ii. For Emission Point (Refrigeration), this Emission Point is a closed system with no TAP emissions. Therefore, there are no compliance monitoring requirements for this Emission Point.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. For Emission Point (Gasoline Tank), the owner or operator shall keep a record of the amount of gasoline received per month to determine compliance with Additional Condition 1.a.i.6).

ii. For Emission Point (Parts Washers), the owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, section 4.4.2)

1) The name and address of the solvent supplier, (Regulation 6.18, section 4.4.2.1)
2) The date of the purchase, (Regulation 6.18, section 4.4.2.2)
3) The type of the solvent, and (Regulation 6.18, section 4.4.2.3)
4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F). (Regulation 6.18, section 4.4.2.4)

iii. All records required in Additional Condition 3.a.ii. shall be retained for 5 years and made available to the District upon request. (Regulation 6.18, section 4.4.3)

iv. The owner or operator shall maintain records of the results of the inspections specified in Additional Condition 2.a.ii.

b. **TAP**

i. For Emission Points (WWTP Truck Unloading, D-115, and D-203), the potential plant-wide TAP emissions for sulfuric acid are below the ASL. Therefore, there are no compliance recordkeeping requirements for these Emission Points.

ii. For Emission Point (Refrigeration), this Emission Point is a closed system with no TAP emissions. Therefore, there are no compliance recordkeeping requirements for this Emission Point.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **VOC**

i. For Emission Point (Gasoline Tank), the owner or operator shall submit a report within 30 calendar days of December 16 (*i.e.* by January 15th of the following year) every year showing that the Regulation 6.40 exemption in Additional Condition 1.a.i.6) still applies. (Regulation 6.40, section 1.3) (See Comment)

ii. For Emission Point (Parts Washers), there are no compliance reporting requirements.

b. **TAP**

i. For Emission Points (WWTP Truck Unloading, D-115, and D-203), the potential plant-wide TAP emissions for sulfuric acid are below the ASL. Therefore, there are no compliance reporting requirements for these Emission Points.

ii. For Emission Point (Refrigeration), this Emission Point is a closed system with no TAP emissions. Therefore, there are no compliance reporting requirements for this Emission Point.

**UMSC Comment**

The following is a summary of the report periods and due dates for the reports required for this emission unit:

| Report Description | Report Period | Report due dates |
|---|---|---|
| Annual for Gasoline | January through December | January 15 |

## Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

## Off-permit Documents

| Document | Date |
|---|---|
| Rule Effectiveness Plan | March 31, 1995 |
| Risk Management Plan | June 18, 2004 |
| One-time Demonstrations | July 25, 2003 |
| PSD Final Determination Document | October 24, 1990 |

## Alternative Operating Scenarios

There are no alternative operating scenarios.

| Source-wide HAP Speciation | | | |
|---|---|---|---|
| **HAP** | **CAS No.** | **HAP** | **CAS No.** |
| Acrylic Acid | 79-10-7 | Hydrochloric Acid [Hydrogen Chloride (gas only)] | 7647-01-0 |
| Acrylonitrile | 107-13-1 | Hydrofluoric Acid (Hydrogen Fluoride) | 7664-39-3 |
| Benzene | 71-43-2 | Styrene | 100-42-5 |
| 1,3-Butadiene | 106-99-0 | Toluene | 108-88-3 |

Note: HAPs cited in the table above are those currently known to be used/emitted at this source, and this table is included for informational purposes only. HAPs with less than 100 lb/yr actual emissions resulting from coal combustion are not listed in the table.

| Insignificant Activities | | |
|---|---|---|
| **Description** | **Quantity** | **Basis** |
| **Source-Wide Associated Insignificant Activities** | | |
| Internal combustion engines fixed or mobile and vehicles used for transport of passengers or freight | various | Regulation 2.02, section 2.2 |
| Brazing, soldering, or welding equipment | various | Regulation 2.02, section 2.3.4 |

| Insignificant Activities | | |
|---|---|---|
| **Description** | **Quantity** | **Basis** |
| Woodworking, not including conveying, hogging or burning of saw dust or wood waste | various | Regulation 2.02, section 2.3.5 |
| Emergency relief vents, stacks, and ventilating systems (not otherwise regulated) | various | Regulation 2.02, section 2.3.10 |
| Lab ventilating and exhausting systems for nonradioactive materials | various | Regulation 2.02, section 2.3.11 |
| Laboratories | 10 | Regulation 2.02, section 2.3.11 |
| Blast Cleaning (using a suspension of Abrasive in Water) | various | Regulation 2.02, section 2.3.13 |
| Maintenance Sand Blasting | various | EPA White Papers |
| Soil or Groundwater remediation - Passive or total removal | various | Regulation 2.02, section 2.3.20 |
| Portable Diesel or Gasoline Storage Tank <500 gal capacity | 1 | Regulations 2.02, section 2.3.23 |
| Maintenance Painting | various | EPA White Papers |
| Machine Shop Maintenance Lathes | various | No Known Regulated Emissions |
| Diesel Fuel Oil Storage Tanks | 12 | Regulations 2.02, section 2.3.9.2 |
| Emergency Power Generators and Internal Tanks | 4 | EPA White Papers |
| Plant Refrigeration System, excluding Receivers (3), but including associated chilled water tanks, compressors, condensers, piping, and heat exchangers | 1 | Closed system |
| Truck/Railcar Loading/Unloading of non-regulated materials | various | No Known Regulated Emissions |
| Catalyst Suppressant Storage Tank (1) and Truck Loading/Unloading (2) | 1 | No Known Regulated Emissions |
| Liquid Nitrogen Storage Tank | 1 | No Known Regulated Emissions |
| Nitrogen Generator | 1 | No Known Regulated Emissions |

| Insignificant Activities | | |
|---|---|---|
| **Description** | **Quantity** | **Basis** |
| Water Tanks, including chilled water tanks | various | No Known Regulated Emissions |
| PMHP Underground Tanks (empty) | 2 | No Known Regulated Emissions |
| Cooling Towers, non-chromium treated water | 6 | Regulation 40 CFR 63 Subpart Q (63.400) |
| Air Conditioner Units (<50 lbs of refrigerant) | various | 40 CFR 82.166 |
| Wastewater Treatment Plant Caustic Solution Tank (D-202) and associated truck loading/unloading | 1 | No Known Regulated Emissions |
| Wastewater Treatment Plant, including spill containment areas | 1 | No Known Regulated Emissions |
| Fire Water Reservoir | 1 | No Known Regulated Emissions |
| Pre-Landfill Non-Hazardous Waste De-watering Pad | 1 | No Known Regulated Emissions |
| Concrete and other debris material storage area | 1 | No Known Regulated Emissions |
| Air Compressors | various | No Known Regulated Emissions |
| Electrical Transformer Coolants (non-PCB) | various | No Known Regulated Emissions |
| Hydraulic Oil Systems | various | No Known Regulated Emissions (Closed systems) |
| Gas Chromatographs and associated validation tanks/cylinder standards | various | No Known Regulated Emissions |
| Miscellaneous Drums and Totes, including Hazardous Waste Storage Areas, and Oiler's Assorted Drums of Oil | various | Regulation 2.02, section 2.3.24 |
| **Emission Unit U1/U2 Associated Insignificant Activities** | | |
| Butadiene Spheres (North Butadiene Sphere and South Butadiene Sphere) | 2 | Regulation 2.02, section 2.3.26 |

| Insignificant Activities | | |
|---|---|---|
| **Description** | **Quantity** | **Basis** |
| Butadiene Day Tanks (Day Tanks 7 through 16) | 10 | Regulation 2.02, section 2.3.26 |
| Chemical Addition Tanks of non-regulated materials and associated truck/railcar loading/unloading | various | No Known Regulated Emissions |
| Jupite Tank (T-6) | 1 | No Known Regulated Emissions |
| Calcium Chloride Tank (T-7) | 1 | No Known Regulated Emissions |
| Overhead Accumulator and column system (D-70 and C-11) | 1 | No Known Regulated Emissions (Closed system) |
| Finishing Building Anti-Stick Agents Usage | various | No Known Regulated Emissions |
| Finishing Building Caustic Solution Tank (D-36) and associated truck loading/unloading | 1 | No Known Regulated Emissions |
| Water Tanks, including East Hot Water Tank (T-8M), West Hot Water Tank (T-8), Separate System Hot Water Tank (T-8T), and associated skimmer tanks (T-7M, T-7, and T-7T) | various | No Known Regulated Emissions |
| Wastewater solids settling pits (HC Wastewater Pit and Fines Pit) | 2 | No Known Regulated Emissions |
| Finished Off-Spec Rubber Product Reclaim Areas | various | No Known Regulated Emissions |
| Emergency Relief Vents, Stacks, and Ventilating Systems (not otherwise regulated) | various | Regulation 2.02, section 2.3.10 |
| Miscellaneous Drums and Totes | various | Regulation 2.02, section 2.3.24 |
| **Emission Unit U3 Associated Insignificant Activities** | | |
| Chemical Addition Tanks of non-regulated materials and associated truck loading/unloading | various | No Known Regulated Emissions |
| Water Tanks | various | No Known Regulated Emissions |
| Soap Tanks (T-72, T-73, and D-135L) | 3 | No Known Regulated Emissions |

| Insignificant Activities | | |
|---|---|---|
| **Description** | **Quantity** | **Basis** |
| Condensate Receivers (D-1L and D-2L) | 2 | No Known Regulated Emissions (Closed system) |
| Five (5) Hold Tanks (HT-1 through HT-5) and Knock-out Tank (KOT) (Non-regulated materials) | 6 | No Known Regulated Emissions |
| Thirteen (13) Blend Tanks (BT-1 through BT-13) and Knock-out Tank (D-76L) (Non-regulated materials) | 14 | No Known Regulated Emissions |
| Bio-Reactor Caustic Solution Tank (D-80L) and associated truck loading/unloading | 1 | No Known Regulated Emissions |
| LP Wastewater Pre-Treatment System, including two (2) Bio-Reactors | 1 | No Known Regulated Emissions |
| LP Brine Storage Tank (D-65L) and associated truck loading/unloading | 1 | No Known Regulated Emissions |
| Emergency Relief Vents, Stacks, and Ventilating Systems (not otherwise regulated) | various | Regulation 2.02, section 2.3.10 |
| Miscellaneous Drums and Totes | various | Regulation 2.02, section 2.3.24 |
| **Emission Unit U4 Associated Insignificant Activities** | | |
| Chemical Addition Tanks of non-regulated materials and associated truck loading/unloading | various | No Known Regulated Emissions |
| Power House Caustic Solution Tank and associated truck loading/unloading | 1 | No Known Regulated Emissions |
| Steam Turbine | 1 | No Known Regulated Emissions |
| Boiler Water Chemical Treatment (Storage and truck loading/unloading) | various | No Known Regulated Emissions |
| Water Tanks | various | No Known Regulated Emissions |
| Lime Handling System Liquid Lime Tanks | 2 | No Known Regulated Emissions |
| Power House Brine Storage Tank and associated truck loading/unloading | 1 | No Known Regulated Emissions |

| Insignificant Activities | | |
|---|---|---|
| **Description** | **Quantity** | **Basis** |
| Fuel Oil Storage Tanks (East and West) (Both submerged fill) | 2 | Regulation 2.02, section 2.3.9.2 |
| Emergency Relief Vents, Stacks, and Ventilating Systems (not otherwise regulated) | various | Regulation 2.02, section 2.3.10 |
| Miscellaneous Drums and Totes | various | Regulation 2.02, section 2.3.24 |
| **Emission Unit UMSC Associated Insignificant Activities** | | |
| Emergency Relief Vents, Stacks, and Ventilating Systems (not otherwise regulated) | various | Regulation 2.02, section 2.3.10 |
| Miscellaneous Drums and Totes | various | Regulation 2.02, section 2.3.24 |

a. Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.

b. Activities identified in Regulation 2.02, section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.

   i. No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirement which shall include a 20% opacity limit for facilities not otherwise regulated.

   ii. No visible emission surveys or other monitoring shall be required for facilities designated as insignificant activities.

c. The Insignificant Activities table is correct as of the date the permit was proposed for review by the USEPA, Region 4. The company shall submit an updated list of insignificant activities annually with the Title V compliance certification pursuant to District Regulation 2.16, section 4.3.5.3.6.

## Appendix A $NO_x$ RACT Plan

1. The oxides of nitrogen ($NO_x$, expressed as $NO_2$) emission from Boiler #1 and Boiler #2 shall not exceed 0.50 pound per million Btu of heat input, based upon a 30-day rolling average. This limit applies at all times, including periods of startup, shutdown, or malfunction.

2. The ASRC shall calibrate, maintain, and operate a continuous emissions monitoring system (CEMS), and record the output of the system, for measuring $NO_x$ emissions from Boiler #1 and Boiler #2. The following requirements apply to the CEMS:
    A. The CEMS shall be operated and data recorded during all periods of operation of a boiler except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks and zero and span adjustments,
    B. The 1-hour average $NO_x$ emission rates measured by the CEMS shall be expressed in pounds per million Btu heat input and shall be used to calculate the average emission rates under $NO_x$ RACT Plan Element (Element) No. 1,
    C. The 1-hour averages shall be calculated using the data points required under 40 CFR §60.13(b). At least 2 data points shall be used to calculate each 1-hour average,
    D. The procedures under 40 CFR §60.13 shall be followed for evaluation and operation of the CEMS,
    E. The span value for $NO_x$ is 500, and
    F. When $NO_x$ emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7, Method 7a, or other reference methods approved by the District to provide emission data for a minimum of 75 % of the operating hours in the boiler operating day, in at least 22 out of 30 successive boiler operating days.

3. The ASRC shall maintain the records listed in 40 CFR §60.49b (g) for Boiler #1 and Boiler #2 with the following clarifications:
    A. The $NO_x$ emission rates shall be expressed in pounds per million Btu heat input measured, and
    B. The applicable $NO_x$ emission limit is contained in Element No. 1.

    Each record shall be maintained for a minimum of 5 years and made available to the District upon request.

4. The $NO_x$ (expressed as $NO_2$) emission from each of Boiler #3 and Boiler #4 shall not exceed 0.20 pound per million Btu of heat input. Neither boiler shall combust a fuel other than natural gas except that Boiler #4 may also combust No. 2 fuel oil.

6. The ASRC shall conduct an annual performance test for $NO_x$ for each of Boiler #3 and Boiler #4. If the requirements of Regulation 6.42 *Reasonably Available Control Technology Requirements for Major Volatile Organic Compound- and Nitrogen Oxides-Emitting Facilities* section 5.1 are met, and subject to the annual performance test schedule reinstitution provision, performance testing may be done on a biennial schedule. Performance testing shall meet the following requirements:

A. Emissions concentrations shall be obtained using Reference Methods of 40 CFR Part 60 Appendix A. The following methods shall be used:
   (1) Method 3, 3A, 3B, or 3C, which is applicable for determining the concentrations of one or more of the following gases: carbon dioxide, $O_2$, CO, nitrogen, and methane,
   (2) Method 4, which determines the moisture content in stack gases, if necessary for calculations due to differences caused by measuring the pollutant and either oxygen or carbon dioxide on a wet or dry basis,
   (3) Method 7, 7A, 7B, 7C, 7D, or 7E, which provides the analytical method for determining the concentration of $NO_x$ emissions from stationary sources, and
   (4) Method 19, which is used in calculating the mass of pollutant per heat input.

B. Sampling shall be conducted as specified in 40 CFR Part 60 Appendix B Performance Specification 2 paragraphs 7.1.1, and 7.1.2, using the traverse points specified in 40 CFR Part 60 Appendix B Performance Specification 2 paragraph 3.2.

C. The use of other Reference Methods that are added to 40 CFR Part 60 Appendix A, alternative tests, or modifications to the Reference Methods listed in $NO_x$ RACT Plan Element (Element) No. 6.A. may be proposed by the ASRC as part of the testing plan required by Element No. 6.E. Such methods may be used if approved in writing by the District.

D. Performance testing shall meet the requirements of Regulation 1.04 *Performance Tests* that are not addressed in this Element.

E. A notification of intent to conduct a performance test shall be submitted to the District at least 25 working days in advance of the projected starting date for the performance test. The notification shall include the proposed test methods to be used.

F. If a pre-test conference to discuss the proposed test methods is deemed necessary by the District, a pre-test conference shall be arranged by District personnel.

G. At least 10 working days' prior notice of the scheduled starting date for the performance test shall be provided to the District.

H. A performance test report shall be submitted to the District within 60 days of completion of performance testing. The report shall include the calculations used to determine emissions. The $NO_x$ emission rate shall be expressed in pounds per million Btu format. The raw data shall be retained by the ASRC for a minimum of 5 years and made available to the District upon request. Selected portions of the raw data used to calculate the emissions shall be included in the report in a format provided by the District.

7. The ASRC shall keep a record identifying all deviations from the requirements of this $NO_x$ RACT Plan and shall submit to the District a written report of all deviations that occurred during the preceding semi-annual period. Semi-annual periods shall run from January 1 to June 30 and July 1 to December 31. The report shall contain the following information:
   A. The boiler number,
   B. The beginning and ending date of the reporting period,
   C. Identification of all periods during which a deviation occurred,
   D. A description, including the magnitude, of the deviation,
   E. If known, the cause of the deviation, and
   F. A description of all corrective actions taken to abate the deviation.

If no deviation occurred during the semi-annual period, the report shall contain a negative declaration. Each report shall be submitted within 60 days following the end of the semi-annual period. Alternatively, a written report of all deviations that occurred during the preceding calendar quarter, or negative declaration, may be made, in which case the quarterly report shall be submitted within 30 days following the end of the calendar quarter.

8. In lieu of the requirements in this $NO_x$ RACT Plan, the ASRC may comply with alternative requirements regarding emission limitations, equipment operation, test methods, monitoring, recordkeeping, or reporting, provided the following conditions are met:
   A. The alternative requirements are established and incorporated into an operating permit pursuant to a Title V Operating Permit issuance, renewal, or significant permit revision process as established in Regulation 2.16,
   B. The alternative requirements are consistent with the streamlining procedures and guidelines set forth in section II.A. of *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, March 5, 1996, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. The overall effect of compliance with alternative requirements shall consider the effect on an intrinsic basis, such as pounds per million Btu. However, alternative requirements that are developed based upon revisions to the applicable requirements contained in 40 CFR Part 60 shall be approvable pursuant to this Element,
   C. The U.S. Environmental Protection Agency (EPA) has not objected to the issuance, renewal, or revision of the Title V Operating Permit, and either
   D. If the public comment period preceded the EPA review period, then the District had transmitted any public comments concerning the alternative requirements to EPA with the proposed permit, or
   E. If the EPA and public comment periods ran concurrently, then the District had transmitted any public comments concerning the alternative requirements to the EPA no later than 5 working days after the end of the public comment period.

   The District's determination of approval of any alternative requirements is not binding on the EPA. Noncompliance with any alternative requirement established pursuant to the Title V Operating Permit process constitutes a violation of the $NO_x$ RACT Plan.

History: Approved 12-20-00; effective 1-1-01.